Form 5500-SF

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Short Form Annual Return/Report of Small Employee Benefit Plan

This form is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA), and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).

▶ **Complete all entries in accordance with the instructions to the Form 5500-SF.**

OMB Nos. 1210-0110
1210-0089

2019

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2019 or fiscal plan year beginning 07/01/2019 and ending 06/30/2020

A This return/report is for:
- [X] a single-employer plan
- [ ] a multiple-employer plan (not multiemployer) (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)
- [ ] a one-participant plan
- [ ] a foreign plan

B This return/report is
- [ ] the first return/report
- [ ] the final return/report
- [ ] an amended return/report
- [ ] a short plan year return/report (less than 12 months)

C Check box if filing under:
- [ ] Form 5558
- [ ] automatic extension
- [ ] DFVC program
- [ ] special extension (enter description)

Part II Basic Plan Information—enter all requested information

1a Name of plan
HAMILTON CASTER & MFG. CO. PENSION PLAN

1b Three-digit plan number (PN) ▶ 001

1c Effective date of plan 07/01/1967

2a Plan sponsor's name (employer, if for a single-employer plan)
Mailing address (include room, apt., suite no. and street, or P.O. Box)
City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions)
HAMILTON CASTER & MFG. CO.

1637 DIXIE HIGHWAY
HAMILTON, OH 45011

2b Employer Identification Number (EIN) 31-0308370

2c Sponsor's telephone number 513-863-3300

2d Business code (see instructions) 332900

3a Plan administrator's name and address [X] Same as Plan Sponsor.

3b Administrator's EIN

3c Administrator's telephone number

4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report.
a Sponsor's name
c Plan Name

4b EIN

4d PN

5a Total number of participants at the beginning of the plan year	5a	84
b Total number of participants at the end of the plan year	5b	84
c Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	5c	
d(1) Total number of active participants at the beginning of the plan year	5d(1)	46
d(2) Total number of active participants at the end of the plan year	5d(2)	41
e Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	5e	0

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including, if applicable, a Schedule SB or Schedule MB completed and signed by an enrolled actuary, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	11/12/2020	STEVEN LIPPERT
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE	Filed with authorized/valid electronic signature.	11/12/2020	STEVEN LIPPERT
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor

6a Were all of the plan's assets during the plan year invested in eligible assets? (See instructions.) [X] Yes [ ] No

b Are you claiming a waiver of the annual examination and report of an independent qualified public accountant (IQPA) under 29 CFR 2520.104-46? (See instructions on waiver eligibility and conditions.) [X] Yes [ ] No

If you answered "No" to either line 6a or line 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.

c If the plan is a defined benefit plan, is it covered under the PBGC insurance program (see ERISA section 4021)? [X] Yes [ ] No [ ] Not determined

If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 4265282. (See instructions.)

Part III Financial Information

7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets	7a	7793502	8254498
b Total plan liabilities	7b	0	0
c Net plan assets (subtract line 7b from line 7a)	7c	7793502	8254498

8 Income, Expenses, and Transfers for this Plan Year		(a) Amount	(b) Total
a Contributions received or receivable from: (1) Employers	8a(1)	285776	
(2) Participants	8a(2)	0	
(3) Others (including rollovers)	8a(3)	0	
b Other income (loss)	8b	546921	
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c		832697
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d	304795	
e Certain deemed and/or corrective distributions (see instructions)	8e	0	
f Administrative service providers (salaries, fees, commissions)	8f	66906	
g Other expenses	8g	0	
h Total expenses (add lines 8d, 8e, 8f, and 8g)	8h		371701
i Net income (loss) (subtract line 8h from line 8c)	8i		460996
j Transfers to (from) the plan (see instructions)	8j	0	

Part IV Plan Characteristics

9a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristic Codes in the instructions:
1A 1I 3H

b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic Codes in the instructions:

Part V Compliance Questions

10 During the plan year:		Yes	No	Amount
a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? (See instructions and DOL's Voluntary Fiduciary Correction Program)	10a		X	
b Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.)	10b		X	0
c Was the plan covered by a fidelity bond?	10c	X		1000000
d Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	10d		X	
e Were any fees or commissions paid to any brokers, agents, or other persons by an insurance carrier, insurance service, or other organization that provides some or all of the benefits under the plan? (See instructions.)	10e	X		23307
f Has the plan failed to provide any benefit when due under the plan?	10f		X	
g Did the plan have any participant loans? (If "Yes," enter amount as of year-end.)	10g		X	
h If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	10h			
i If 10h was answered "Yes," check the box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3	10i			

Part VI Pension Funding Compliance

11 Is this a defined benefit plan subject to minimum funding requirements? (If "Yes," see instructions and complete Schedule SB (Form 5500) and lines 11a and b below.) If this is a defined contribution pension plan, leave line 11 blank and complete line 12 below. ☒ Yes ☐ No

a Enter the unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 **11a** 0

b **PBGC missed contribution reporting requirements.** If the plan is covered by PBGC and the amount reported on line 11a is greater than $0, has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:

☐ Yes.

☐ No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date.

☐ No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date.

☐ No. Other. Provide explanation _____

12 Is this a defined contribution plan subject to the minimum funding requirements of section 412 of the Code or section 302 of ERISA? (If "Yes," complete line 12a or lines 12b, 12c, 12d, and 12e below, as applicable.) If this is a defined benefit pension plan, leave line 12 blank and complete line 11 above. ☐ Yes ☐ No

a If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions, and enter the date of the letter ruling granting the waiver. Month _____ Day _____ Year _____

If you completed line 12a, complete lines 3, 9, and 10 of Schedule MB (Form 5500), and skip to line 13.

b Enter the minimum required contribution for this plan year **12b**

c Enter the amount contributed by the employer to the plan for this plan year **12c**

d Subtract the amount in line 12c from the amount in line 12b. Enter the result (enter a minus sign to the left of a negative amount) **12d**

e Will the minimum funding amount reported on line 12d be met by the funding deadline? ☐ Yes ☐ No ☐ N/A

Part VII Plan Terminations and Transfers of Assets

13a Has a resolution to terminate the plan been adopted in any plan year? ☐ Yes ☒ No

If "Yes," enter the amount of any plan assets that reverted to the employer this year **13a**

b Were all the plan assets distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC? ☐ Yes ☒ No

c If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

13c(1) Name of plan(s):	**13c(2)** EIN(s)	**13c(3)** PN(s)

SCHEDULE SB (Form 5500)	Single-Employer Defined Benefit Plan Actuarial Information	OMB No. 1210-0110
Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ **File as an attachment to Form 5500 or 5500-SF.**	**2019** **This Form is Open to Public Inspection**

For calendar plan year 2019 or fiscal plan year beginning 07/01/2019 and ending 06/30/2020

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of $1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan
HAMILTON CASTER & MFG. CO. PENSION PLAN

B Three-digit plan number (PN) ▶ 001

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF
HAMILTON CASTER & MFG. CO.

D Employer Identification Number (EIN)
31-0308370

E Type of plan: [X] Single [ ] Multiple-A [ ] Multiple-B

F Prior year plan size: [X] 100 or fewer [ ] 101-500 [ ] More than 500

Part I Basic Information

1 Enter the valuation date: Month 07 Day 01 Year 2019

2 Assets:

a Market value	**2a**	7792251
b Actuarial value	**2b**	7585805

3 Funding target/participant count breakdown

	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	34	2420108	2420108
b For terminated vested participants	6	166732	166732
c For active participants	46	5975089	6075498
d Total	86	8561929	8662338

4 If the plan is in at-risk status, check the box and complete lines (a) and (b) [ ]

a Funding target disregarding prescribed at-risk assumptions	**4a**	
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	**4b**	
5 Effective interest rate	**5**	5.47 %
6 Target normal cost	**6**	67000

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE

Signature of actuary	Date: 11/02/2020
MICHAEL A. CARLSON Type or print name of actuary	20-05860 Most recent enrollment number
PRINCIPAL FINANCIAL GROUP Firm name	412-394-9331 Telephone number (including area code)
PO BOX 9394 DES MOINES, IA 50306-9394 Address of the firm	

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions [ ]

Part II Beginning of Year Carryover and Prefunding Balances

		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	0
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	0	0
10	Interest on line 9 using prior year's actual return of 9.14 %	0	0
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		111241
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of 5.64 %		6274
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
	c Total available at beginning of current plan year to add to prefunding balance		117515
	d Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	0

Part III Funding Percentages

14	Funding target attainment percentage	14	87.57 %
15	Adjusted funding target attainment percentage	15	87.57 %
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	88.35 %
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
10/09/2019	68354	0			
01/15/2020	68922	0			
03/24/2020	69000	0			
07/13/2020	63000	0			
07/20/2020	16500	0			
			Totals ► 18(b)	285776	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:

a Contributions allocated toward unpaid minimum required contributions from prior years	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	275932

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? [X] Yes [ ] No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? [X] Yes [ ] No

c If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:

a Segment rates:

1st segment:	2nd segment:	3rd segment:	N/A, full yield curve used
3.74 %	5.35 %	6.11 %	

b Applicable month (enter code)	**21b**	0
22 Weighted average retirement age	**22**	67

23 Mortality table(s) (see instructions) [X] Prescribed - combined [ ] Prescribed - separate [ ] Substitute

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment [X] Yes [ ] No

25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment [ ] Yes [X] No

26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment [X] Yes [ ] No

27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	**27**	

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	**28**	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	**29**	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	**30**	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):

a Target normal cost (line 6)	**31a**	67000
b Excess assets, if applicable, but not greater than line 31a	**31b**	0

32 Amortization installments:

	Outstanding Balance	Installment
a Net shortfall amortization installment	1076533	208686
b Waiver amortization installment	0	0

33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	**33**	
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	**34**	275686

	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	0	0

36 Additional cash requirement (line 34 minus line 35)	**36**	275686
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	275932

38 Present value of excess contributions for current year (see instructions)

a Total (excess, if any, of line 37 over line 36)	**38a**	246
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	**38b**	0
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	**39**	0
40 Unpaid minimum required contributions for all years	**40**	0

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:

a Schedule elected [ ] 2 plus 7 years [ ] 15 years

b Eligible plan year(s) for which the election in line 41a was made [ ] 2008 [ ] 2009 [ ] 2010 [ ] 2011

Schedule SB, Line 26 - Schedule of Active Participant Data
Hamilton Caster & Mfg. Co. Pension Plan
EIN 31-0308370 Plan No. 001

Form 5500 - Schedule of Active Participation Data Valuation Date 07/01/2019

YEARS OF CREDITED SERVICE

Attained Age	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 & up	
	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25	0		0		0		0		0		0		0		0		0		0	
25 to 29	0		0		0		0		0		0		0		0		0		0	
30 to 34	0		0		0		0		0		0		0		0		0		0	
35 to 39	0		0		0		0		0		0		0		0		0		0	
40 to 44	0		0		0		0		0		0		0		0		0		0	
45 to 49	2		0		0		0		0		0		0		0		0		0	
50 to 54	6		0		0		0		0		0		0		0		0		0	
55 to 59	16		0		0		0		0		0		0		0		0		0	
60 to 64	15		0		0		0		0		0		0		0		0		0	
65 to 69	5		0		0		0		0		0		0		0		0		0	
70 & up	2		0		0		0		0		0		0		0		0		0	

Assumptions prescribed by law

Mortality

During benefit payment period

IRS Prescribed Mortality - Optional Combined Table for Small Plans, male and female.

Before benefit payment period

IRS Prescribed Mortality - Optional Combined Table for Small Plans, male and female.

Assumptions selected by actuary

Inflation

2.25% increase per year.

See Long-Term Capital Market Assumptions link.

Asset return

5.75% for the current plan year.

The asset return is developed as a weighted average rate based on the target asset allocation of the plan and the long-term capital market assumptions. The calculated return is on an arithmetic mean basis. For details, see the Long-Term Capital Market Assumptions link.

Expected expense

The expected expense included in target normal cost is an estimate based on prior year expenses paid from plan assets, with an updated estimate of PBGC premiums. This is the best estimate available of upcoming year's expenses.

Retirement

Active participants

Age	Salaried - Probability of retirement	Hourly - Probability of retirement
55-61	0.01	0.00
62-64	0.05	0.00
65	0.33	0.33
66-69	0.20	0.20
70	1.00	1.00

Inactive participants are assumed to retire at age 65.

Due to our short tenure as actuaries on this plan, we don't have the experience necessary to set this assumption and we are relying on the assumption set by the prior actuary. This assumption is reasonable with the plan's design. As we gain experience, we will continue to monitor and make appropriate adjustments to this assumption in the future.

Disability

Active participants

Age	Hourly - Probability of disablement
40	0.0040
45	0.0042
50	0.0073
55	0.0140
60	0.0248

Salaried employees and inactive participants have no disability assumptions.

Due to our short tenure as actuaries on this plan, we don't have the experience necessary to set this assumption and we are relying on the assumption set by the prior actuary. This assumption is reasonable with the plan's design. As we gain experience, we will continue to monitor and make appropriate adjustments to this assumption in the future.

Marriage

80% married; husbands are 3 years older than wives.

This assumption does not have material impact on the results of this report and has been selected based on our best estimate of active workforce.

Withdrawal

T-1 (Salaried) and T-3 (Hourly) Table from the Actuary's Pension Handbook

Selected rates of withdrawal are shown below:

Age	Salaried - Probability of withdrawal	Hourly - Probability of withdrawal
25	0.049	0.053
30	0.037	0.048
40	0.011	0.038
50	0.000	0.015
60+	0.000	0.000

Inactive participants have no disability assumptions.

Form of benefit

Participants are assumed to receive their benefits on the normal form at the assumed retirement age.

Methods prescribed by law

Liability measure

Funding target is the present value of the benefits accrued on the valuation date.

Target normal cost is based on benefits expected to accrue during the current plan year and includes an estimate of plan expenses for the year.

HCE benefit payment restrictions

A ratio of the plan assets and accrued liability is used to determine if restrictions apply. Assets and accrued liability are as of the valuation date and are reduced by:

- any retiree benefit index or floor
- amounts for HCEs who were previously restricted
- an amount for the retiring HCE

The estimated HCE ratio illustrated in this report is based on the market value of plan assets (excluding late deposits) and funding target as of the valuation date. The funding target uses the non-stabilized interest rates as defined in IRC §430(h)(2)(C)(iv). Other assumptions or methods could be used.

Methods selected by plan sponsor

Asset method

The asset valuation method is prescribed by law for plans that elect to use a value other than market value.

For each of the preceding two years, an expected value of assets at the end of the year is compared to the end of year market value. The resulting gain or loss is recognized evenly over three plan years.

The expected value includes contributions, distributions, any deducted administrative expenses, and expected earnings (based on the lesser of the assumed interest rate or the maximum allowable rate). The deferred gains and losses are added to the current market value and then restricted to no more than 110% and no less than 90% of that market value.

When actual returns exceed the assumed return, the actuarial value of assets will lag below market value. The lag and the smoothing effect are limited since the value must be within 10% of market value.

Segment rates

24-month average with no weighting to prior law basis. Use rates where July 2019 is the last month included in the average.

PBGC premium basis

Your plan is a small plan as defined by PBGC. Variable rate premiums are calculated using census, market value of assets and interest rates in effect on the prior valuation date. Interest rates are the 24-month average rates used for annual cost but without the interest rate corridor defined in IRC §430(h)(2)(C)(iv). You elected this Alternative interest method for the 07/01/2010 plan year and this method must be used for five years before a change can be made.

Methods elected by actuary

Retirees

Assets and liabilities for current and future retirees are included.

Vested benefits

A benefit is included in vested benefits if it meets the requirements under PBGC. The benefit is multiplied by the participant's vesting percentage applicable to each benefit on the valuation date.

The following ancillary benefits are always treated as nonvested: disability benefits payable to retirement age unless in pay status, pre-retirement death benefits in excess of the survivor annuity death benefit and post retirement death benefits for non-retired participants except as noted in the Plan provisions.

Assumptions and methods elected by actuary - plan accounting (ASC 960)
With the exceptions below, all assumptions and methods are the same as those used in determining your plan's regular funding target and target normal cost.

Mortality

Based on RP-2006 total dataset mortality table projected to future years with historical and assumed mortality improvement (MI) rates using the Principal Mortality Improvement Scale (PFG2014-10).

RP-2006 is a baseline mortality rates table underlying the SOA RP-2014 experience study as of central year of the experience data for 2004-2008 years. The Principal Mortality Improvement scale is based on the SOA MI model RPEC_2014_v2018 and Principal-selected assumption set published November 2018. For detailed rationale please see full Mortality documentation.

Interest rate used to value liabilities

5.75%

The interest rate used to value ASC 960 liabilities is developed as long-term expected geometric return on plan assets. Arithmetic expected return is calculated as the weighted average of broad asset classes' arithmetic returns of the plan's target asset allocation, and then converted to the geometric under lognormal distribution assumption. For details, see Long-Term Capital Market Assumptions link.

Treatment of administrative expenses

No adjustments are made for administrative expenses, either through a reduction in the discount rate or by calculating a present value of future expenses.

Plan sponsors may change their administrative expense handling at any time. Our approach provides consistent handling of ASC 960 liabilities from year to year, whether expenses are paid with plan assets or directly by the employer.

Note - expenses paid with plan assets are required to be included in funding normal cost. As a result, the plan is reimbursed annually through required funding. Exception – contributions are not required due to assets sufficiently in excess of liabilities to fund both expenses and normal cost. In this case, administrative expenses are taken from the excess assets.

SCHEDULE SB (Form 5500)	Single-Employer Defined Benefit Plan Actuarial Information	OMB No. 1210-0110
Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ **File as an attachment to Form 5500 or 5500-SF.**	**2019** **This Form is Open to Public Inspection**

For calendar plan year 2019 or fiscal plan year beginning 07/01/2019 and ending 06/30/2020

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of $1,000 will be assessed for late filing of this report unless reasonable cause is established.

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Hamilton Caster & Mfg. Co. Pension Plan

B Three-digit plan number (PN) ▶ 001

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF
Hamilton Caster & Mfg. Co.

D Employer Identification Number (EIN)
31-0308370

E Type of plan: [X] Single [ ] Multiple-A [ ] Multiple-B

F Prior year plan size: [X] 100 or fewer [ ] 101-500 [ ] More than 500

Part I Basic Information

1 Enter the valuation date: Month 07 Day 01 Year 2019

2 Assets:

a Market value	**2a**	7792251
b Actuarial value	**2b**	7585805

3 Funding target/participant count breakdown

	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
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c For active participants	46	5975089	6075498
d Total	86	8561929	8662338

4 If the plan is in at-risk status, check the box and complete lines (a) and (b) [ ]

a Funding target disregarding prescribed at-risk assumptions	**4a**	
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	**4b**	
5 Effective interest rate	**5**	5.47 %
6 Target normal cost	**6**	67000

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE

MAC

Signature of actuary — Date: 11/02/2020

Michael A. Carlson — Type or print name of actuary

2005860 — Most recent enrollment number

Principal Financial Group — Firm name

412-394-9331 — Telephone number (including area code)

PO Box 9394 Des Moines, IA 50306-9394

Address of the firm

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions [ ]

Part II Beginning of Year Carryover and Prefunding Balances

		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	0
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	0	0
10	Interest on line 9 using prior year's actual return of 9.14 %	0	0
11	Prior year's excess contributions to be added to prefunding balance:		
a	Present value of excess contributions (line 38a from prior year)		111241
b(1)	Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of 5.64 %		6274
b(2)	Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
c	Total available at beginning of current plan year to add to prefunding balance		117515
d	Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	0

Part III Funding Percentages

14	Funding target attainment percentage	14	87.57 %
15	Adjusted funding target attainment percentage	15	87.57 %
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	88.35 %
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
10/09/2019	68354	0			
01/15/2020	68922	0			
03/24/2020	69000	0			
07/13/2020	63000	0			
07/20/2020	16500	0			
			Totals ► 18(b)	285776	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:

a Contributions allocated toward unpaid minimum required contributions from prior years	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	275932

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? [X] Yes [ ] No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? [X] Yes [ ] No

c If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:

a Segment rates:

1st segment:	2nd segment:	3rd segment:	N/A, full yield curve used
3.74 %	5.35 %	6.11 %	

b Applicable month (enter code)	**21b**	0
22 Weighted average retirement age	**22**	67

23 Mortality table(s) (see instructions) [X] Prescribed - combined [ ] Prescribed - separate [ ] Substitute

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment [X] Yes [ ] No

25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment [ ] Yes [X] No

26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment [X] Yes [ ] No

27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	**27**	

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	**28**	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	**29**	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	**30**	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):

a Target normal cost (line 6)	**31a**	67000
b Excess assets, if applicable, but not greater than line 31a	**31b**	0

32 Amortization installments:

	Outstanding Balance	Installment
a Net shortfall amortization installment	1076533	208686
b Waiver amortization installment	0	0

33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	**33**	
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	**34**	275686

	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	0	0

36 Additional cash requirement (line 34 minus line 35)	**36**	275686
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	275932

38 Present value of excess contributions for current year (see instructions)

a Total (excess, if any, of line 37 over line 36)	**38a**	246
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	**38b**	0
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	**39**	0
40 Unpaid minimum required contributions for all years	**40**	0

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:

a Schedule elected [ ] 2 plus 7 years [ ] 15 years

b Eligible plan year(s) for which the election in line 41a was made [ ] 2008 [ ] 2009 [ ] 2010 [ ] 2011

Schedule SB, Line 2a - Explanation of Assets
Hamilton Caster & Mfg. Co. Pension Plan
EIN 31-0308370 Plan No. 001

The market value of assets on line 2a does not equal assets shown on Schedule H, Schedule I or Form 5500-SF. Schedule H, Schedule I and Form 5500-SF use the full value of contributions received after plan year end. Line 2a includes the value of $100,000 contributions received after the plan year end with a discounted value of $98,749.

Schedule SB, Line 22 - Description of Weighted Average Retirement Age
Hamilton Caster & Mfg. Co. Pension Plan
EIN 31-0308370 Plan No. 001

The weighted average retirement age is weighted by the number of active participants whose assumed retirement age occurs at each age. The retirement rate reflects only those participants who meet retirement eligibility. An active participant working past assumed retirement age is expected to retire at current age.

(1) Age	(2) Expected Active Headcount	(3) Retirement Rate	(4) Expected Retirements (2)*(3)	(5) Weighted Age (1)*(4)
55	9.8413	0.0071	0.0696	3.8282
56	11.7090	0.0059	0.0688	3.8503
57	15.5437	0.0044	0.0679	3.8695
58	21.3003	0.0046	0.0969	5.6223
59	22.9271	0.0050	0.1155	6.8170
60	22.4777	0.0051	0.1139	6.8342
61	24.0045	0.0055	0.1321	8.0602
62	27.4127	0.0274	0.7505	46.5329
63	30.0455	0.0252	0.7584	47.7780
64	31.4993	0.0243	0.7651	48.9690
65	31.7721	0.3300	10.4848	681.5121
66	23.2029	0.2000	4.6406	306.2789
67	18.3342	0.2000	3.6668	245.6777
68	15.4691	0.2000	3.0938	210.3801
69	12.1912	0.2000	2.4382	168.2381
70	10.5934	1.0000	10.5934	741.5389
71	0.0000	1.0000	0.0000	0.0000
72	1.0000	1.0000	1.0000	72.0000
73	1.0000	1.0000	1.0000	73.0000
Total			39.8565	2,680.7873
Average				67.26

This report reflects the maximum benefit limits under Internal Revenue Code (IRC) Section 415 and maximum compensation limits under IRC Section 401 in effect on the first day of each plan year.

The following is a summary of plan provisions and does not alter the intent or meanings of the provisions contained in the contract or plan document. This report reflects the provisions of the plan signed 11/23/2015.

Plan eligibility

Age None

Service One year of service in which at least 1,000 hours worked.

Class All Hourly Employees and Salaried Employees, excluding Leased Employees.

Plan participation is frozen effective 06/30/2011.

Normal retirement benefit

Age Attained age 65.

Service Five years of participation.

Form Monthly annuity payable for life (optional forms may be elected in advance of retirement).

Amount (accrued benefit)

Salaried Employees
The greater of A) and B):

A) 50% of average compensation minus 50% of primary Social Security Benefit multiplied by an accrued benefit adjustment

B) $28.00 multiplied by accrual service (maximum 47 years)

Hourly Employees
Benefit multiplier times years of service (maximum 47 years)

Effective Date	Benefit Multiplier
March 11, 2002	$24.00
March 11, 2004	$25.00
March 5, 2007	$26.00
March 3, 2008	$27.00
March 1, 2010	$28.00

Benefit accruals are frozen effective 06/30/2011.

Early retirement benefit

Age	Attained age 55.
Service	Completed 15 years of service.
Form	Same as normal retirement benefit.
Amount	**Salaried Employees** Accrued benefit on early retirement date reduced by 5/9 of 1% for each year up to five and 5/18 of 1% for each year between five and ten that the early retirement date precedes normal retirement date. **Hourly Employees** Accrued benefit on early retirement date reduced by 1/2 of 1% for each year that the early retirement date precedes normal retirement date.

Late retirement benefit

Age	No maximum age.
Form	Same as normal retirement benefit.
Amount	Greater of accrued benefit on late retirement date or accrued benefit on normal retirement date actuarially increased to late retirement date.

Termination benefit

Vesting percentage	100% after five years of vesting service.
Form	Same as normal retirement benefit with income deferred until normal retirement date.
Amount	Accrued benefit on date of termination multiplied by the vesting percentage.

Disability benefit

Eligibility	Disabled while employed, and disabled prior to July 1, 2011 (Salaried only).
Service	15 years of vesting service.
Form	Monthly income payable until normal retirement, death, or recovery and a deferred annuity payable at the normal retirement date.
Amount	**Salaried Employees** Remained a salaried employee on paid leave of absence with continued years of service and level future earnings until 06/30/2011 freeze date. **Hourly Employees** Eligible for an unreduced accrued benefit payable immediately based on years of service and unit benefit in effect on the date of disability.

Survivor annuity death benefit (a vested benefit)

Eligibility	Qualified married participant fully or partially vested in an accrued benefit.
Form	Monthly annuity payable to spouse, deferred to participant's earliest retirement date if later than the date of death.
Amount	If death occurs, the amount paid to the surviving spouse is equal to the amount that would have been paid had the participant terminated employment on the date of death and survived to his/her earliest retirement age, retired with a qualified joint and 50% survivor annuity in effect, then died the next day.

Definitions

Accrued benefit adjustment	The quotient of (a) divided by (b): A) The member's accrual service as of such date (max 30 years). B) 30 The accrued benefit adjustment cannot be greater than 1.0.
Average compensation	The monthly average of "415" pay plus elective deferral contributions received for the highest consecutive five years out of all years.
Primary social security benefit	Primary monthly old-age insurance benefit participant is entitled to receive following attainment of age 65.
Optional forms of benefit payments	The optional forms of benefit payments are: • Monthly annuity payable for life, or 10 or 15 years certain and life. • Monthly annuity payable as a survivorship life annuity with survivorship percentages of 50, 75, or 100. • Monthly annuity payable for a fixed period of 5 years. • Single sum of present value of accrued benefit greater than $5,000, but less than $9,000 retirement or termination. The optional form conversion basis is 7.0% interest and the mortality table in Revenue Ruling 95-6 for payments other than lump sums.

Changes in Principal Eligibility or Benefit Provisions

There have been no changes in principal eligibility or benefit provisions since the last valuation.

Significant Event

The enrolled actuary has not been made aware that any significant events have occurred during the year.

Schedule SB, Line 32 - Schedule of Amortization Bases
Hamilton Caster & Mfg. Co. Pension Plan
EIN 31-0308370 Plan No. 001

Shortfall

Date created	Present value	Remaining years	Annual charge
07/01/2019	$278,606	7	$45,270
07/01/2018	265,128	6	48,891
07/01/2017	532,799	5	114,525
Total	**$1,076,533**		**$208,686**

Last year's total shortfall annual charge was $163,416.

The total annual charge used in calculating your annual cost can't be less than zero.

Waiver charges represent your repayment to the plan for an annual charge that was not funded. A waiver only exists once the Internal Revenue Service has granted approval. See Waivers in Rules and regulations.

Waiver

Date created	Present value	Remaining years	Annual charge
N/A	N/A	N/A	N/A

There are no waiver bases for the current year.

Schedule SB, Line 24 – Change in Actuarial Assumptions
Hamilton Caster & Mfg. Co. Pension Plan
EIN 31-0308370 Plan No. 001

Certain non-prescribed assumptions have been changed since last year. These assumptions were changed to better reflect the anticipated experience of your plan. See the attachment, Part V – Statement of Actuarial Assumptions/Methods, for the rationale for each assumption.

The assumed asset return for the current year has increased from 5.50% to 5.75%.

The inflation assumption has increased/decreased from 2.00% to 2.25%.