Form 5500

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Annual Return/Report of Employee Benefit Plan

This form is required to be filed for employee benefit plans 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.**

OMB Nos. 1210-0110
1210-0089

2018

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2018 or fiscal plan year beginning 01/01/2018 and ending 12/31/2018

A This return/report is for:
- [ ] a multiemployer plan
- [ ] a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)
- [X] a single-employer plan
- [ ] a DFE (specify) ____

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 If the plan is a collectively-bargained plan, check here. . . . . ▶ [ ]

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

Part II Basic Plan Information—enter all requested information

1a Name of plan
LIBBEY INC. SALARIED CASH BALANCE PENSION PLAN

1b Three-digit plan number (PN) ▶ 003

1c Effective date of plan 06/24/1993

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)

LIBBEY INC.

300 MADISON AVENUE
P.O. BOX 10060
TOLEDO, OH 43699-0060

2b Employer Identification Number (EIN) 34-1559357

2c Plan Sponsor's telephone number 419-325-2100

2d Business code (see instructions) 327210

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 accompanying schedules, statements and attachments, 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.	10/02/2019	SARAH J ZIBBEL
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE	Filed with authorized/valid electronic signature.	10/08/2019	SUSAN A KOVACH
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

3a Plan administrator's name and address ☐ Same as Plan Sponsor

LIBBEY INC. EMPLOYEE BENEFITS COMMITTEE
ATTN PAT HANNA
300 MADISON AVENUE
PO BOX 10060
TOLEDO, OH 43699-0060

3b Administrator's EIN: 34-1559357

3c Administrator's telephone number: 419-325-2100

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

5 Total number of participants at the beginning of the plan year	**5**	1392
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines **6a(1), 6a(2), 6b, 6c,** and **6d**).		
a(1) Total number of active participants at the beginning of the plan year	**6a(1)**	259
a(2) Total number of active participants at the end of the plan year	**6a(2)**	245
b Retired or separated participants receiving benefits	**6b**	533
c Other retired or separated participants entitled to future benefits	**6c**	439
d Subtotal. Add lines **6a(2)**, **6b**, and **6c**	**6d**	1217
e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.	**6e**	120
f Total. Add lines **6d** and **6e**.	**6f**	1337
g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	**6g**	
h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	**6h**	
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item)	**7**	

8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:

1A 1C 1I

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

9a Plan funding arrangement (check all that apply)

(1)	☐	Insurance
(2)	☐	Code section 412(e)(3) insurance contracts
(3)	☒	Trust
(4)	☐	General assets of the sponsor

9b Plan benefit arrangement (check all that apply)

(1)	☐	Insurance
(2)	☐	Code section 412(e)(3) insurance contracts
(3)	☒	Trust
(4)	☐	General assets of the sponsor

10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

a Pension Schedules

(1)	☒	**R** (Retirement Plan Information)
(2)	☐	**MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
(3)	☒	**SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary

b General Schedules

(1)	☒		**H** (Financial Information)
(2)	☐		**I** (Financial Information – Small Plan)
(3)	☐	0	**A** (Insurance Information)
(4)	☐		**C** (Service Provider Information)
(5)	☒		**D** (DFE/Participating Plan Information)
(6)	☐		**G** (Financial Transaction Schedules)

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ..... ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ..... ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2018 Form M-1 annual report. If the plan was not required to file the 2018 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code_____

SCHEDULE SB (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Single-Employer Defined Benefit Plan Actuarial Information

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.**

OMB No. 1210-0110

2018

This Form is Open to Public Inspection

For calendar plan year 2018 or fiscal plan year beginning 01/01/2018 and ending 12/31/2018

▶ **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
LIBBEY INC. SALARIED CASH BALANCE PENSION PLAN

B Three-digit plan number (PN) ▶ 003

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF
LIBBEY INC.

D Employer Identification Number (EIN)
34-1559357

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

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

Part I Basic Information

1 Enter the valuation date: Month 01 Day 01 Year 2018

2 Assets:

a Market value	**2a**	88104562
b Actuarial value	**2b**	83051192

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	666	33083185	33083185
b For terminated vested participants	467	18727956	18727956
c For active participants	259	18519128	18970129
d Total	1392	70330269	70781270

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**	5.61 %
6 Target normal cost	**6**	234313

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

09/17/2019
Date

ANDREW E. DUNN
Type or print name of actuary

17-07908
Most recent enrollment number

WILLIS TOWERS WATSON US LLC
Firm name

216-937-4000
Telephone number (including area code)

1001 LAKESIDE AVENUE
SUITE 1500
CLEVELAND, OH 44114-1172
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 15.82 %	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)		0
	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 5.81 %		0
	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		0
	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	117.33%
15	Adjusted funding target attainment percentage	15	117.33%
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	124.80%
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
			Totals ► 18(b)	0	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	0

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☒ No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ 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:	
4.16%	5.72%	6.48%	☐ N/A, full yield curve used

b Applicable month (enter code)	**21b**	4
22 Weighted average retirement age	**22**	63

23 Mortality table(s) (see instructions)

Prior regulation: ☐ Prescribed - combined ☐ Prescribed - separate ☐ Substitute

Current regulation: ☐ 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. ☐ Yes ☒ No

25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment. ☐ Yes ☒ No

26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment. ☒ 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**	234313
b Excess assets, if applicable, but not greater than line 31a	**31b**	234313

32 Amortization installments:	Outstanding Balance	Installment
a Net shortfall amortization installment	0	0
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**	0

	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**	0
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	0

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

a Total (excess, if any, of line 37 over line 36)	**38a**	0
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 D (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

DFE/Participating Plan Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2018

This Form is Open to Public Inspection.

For calendar plan year 2018 or fiscal plan year beginning 01/01/2018 and ending 12/31/2018

A Name of plan
LIBBEY INC. SALARIED CASH BALANCE PENSION PLAN

B Three-digit plan number (PN) ▶ 003

C Plan or DFE sponsor's name as shown on line 2a of Form 5500
LIBBEY INC.

D Employer Identification Number (EIN)
34-1559357

Part I Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs)

(Complete as many entries as needed to report all interests in DFEs)

a Name of MTIA, CCT, PSA, or 103-12 IE: LIBBEY INC. MASTER RETIREMENT TRUST

b Name of sponsor of entity listed in (a): LIBBEY INC.

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
06-1702366-001	M	76910607

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

Part II Information on Participating Plans (to be completed by DFEs)

(Complete as many entries as needed to report all participating plans)

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

a Plan name	
b Name of plan sponsor	**c** EIN-PN

SCHEDULE H (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Financial Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2018

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For calendar plan year 2018 or fiscal plan year beginning 01/01/2018 and ending 12/31/2018

A Name of plan
LIBBEY INC. SALARIED CASH BALANCE PENSION PLAN

B Three-digit plan number (PN) ▶ 003

C Plan sponsor's name as shown on line 2a of Form 5500
LIBBEY INC.

D Employer Identification Number (EIN)
34-1559357

Part I Asset and Liability Statement

1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reported on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. **Round off amounts to the nearest dollar.** MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.

Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash	1a		
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)		
(2) Participant contributions	1b(2)		
(3) Other	1b(3)		
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit)	1c(1)		
(2) U.S. Government securities	1c(2)		
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)		
(B) All other	1c(3)(B)		
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)		
(B) Common	1c(4)(B)		
(5) Partnership/joint venture interests	1c(5)		
(6) Real estate (other than employer real property)	1c(6)		
(7) Loans (other than to participants)	1c(7)		
(8) Participant loans	1c(8)		
(9) Value of interest in common/collective trusts	1c(9)		
(10) Value of interest in pooled separate accounts	1c(10)		
(11) Value of interest in master trust investment accounts	1c(11)	88104562	76910607
(12) Value of interest in 103-12 investment entities	1c(12)		
(13) Value of interest in registered investment companies (e.g., mutual funds)	1c(13)		
(14) Value of funds held in insurance company general account (unallocated contracts)	1c(14)		
(15) Other	1c(15)		

			(a) Beginning of Year	(b) End of Year
1d	Employer-related investments:			
	(1) Employer securities	1d(1)		
	(2) Employer real property	1d(2)		
e	Buildings and other property used in plan operation	1e		
f	Total assets (add all amounts in lines 1a through 1e)	1f	88104562	76910607
	Liabilities			
g	Benefit claims payable	1g		
h	Operating payables	1h		
i	Acquisition indebtedness	1i		
j	Other liabilities	1j		
k	Total liabilities (add all amounts in lines 1g through1j)	1k	0	0
	Net Assets			
l	Net assets (subtract line 1k from line 1f)	1l	88104562	76910607

Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

	Income		(a) Amount	(b) Total
a	**Contributions:**			
	(1) Received or receivable in cash from: **(A)** Employers	2a(1)(A)		
	(B) Participants	2a(1)(B)		
	(C) Others (including rollovers)	2a(1)(C)		
	(2) Noncash contributions	2a(2)		
	(3) Total contributions. Add lines **2a(1)(A), (B), (C),** and line **2a(2)**	2a(3)		0
b	**Earnings on investments:**			
	(1) Interest:			
	(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)		
	(B) U.S. Government securities	2b(1)(B)		
	(C) Corporate debt instruments	2b(1)(C)		
	(D) Loans (other than to participants)	2b(1)(D)		
	(E) Participant loans	2b(1)(E)		
	(F) Other	2b(1)(F)		
	(G) Total interest. Add lines **2b(1)(A)** through **(F)**	2b(1)(G)		0
	(2) Dividends: **(A)** Preferred stock	2b(2)(A)		
	(B) Common stock	2b(2)(B)		
	(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)		
	(D) Total dividends. Add lines **2b(2)(A)**, **(B)**, and **(C)**	2b(2)(D)		0
	(3) Rents	2b(3)		
	(4) Net gain (loss) on sale of assets: **(A)** Aggregate proceeds	2b(4)(A)		
	(B) Aggregate carrying amount (see instructions)	2b(4)(B)		
	(C) Subtract line **2b(4)(B)** from line **2b(4)(A)** and enter result	2b(4)(C)		0
	(5) Unrealized appreciation (depreciation) of assets: **(A)** Real estate	2b(5)(A)		
	(B) Other	2b(5)(B)		
	(C) Total unrealized appreciation of assets. Add lines **2b(5)(A)** and **(B)**	2b(5)(C)		0

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		-5009838
(9) Net investment gain (loss) from 103-12 investment entities	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		
c Other income	2c		
d Total income. Add all **income** amounts in column (b) and enter total	2d		-5009838
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	6184117	
(2) To insurance carriers for the provision of benefits	2e(2)		
(3) Other	2e(3)		
(4) Total benefit payments. Add lines **2e(1)** through **(3)**	2e(4)		6184117
f Corrective distributions (see instructions)	2f		
g Certain deemed distributions of participant loans (see instructions)	2g		
h Interest expense	2h		
i Administrative expenses: (1) Professional fees	2i(1)		
(2) Contract administrator fees	2i(2)		
(3) Investment advisory and management fees	2i(3)		
(4) Other	2i(4)		
(5) Total administrative expenses. Add lines **2i(1)** through **(4)**	2i(5)		0
j Total expenses. Add all **expense** amounts in column (b) and enter total	2j		6184117
Net Income and Reconciliation			
k Net income (loss). Subtract line **2j** from line **2d**	2k		-11193955
l Transfers of assets:			
(1) To this plan	2l(1)		
(2) From this plan	2l(2)		

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) [ ] Unqualified **(2)** [ ] Qualified **(3)** [X] Disclaimer **(4)** [ ] Adverse

b Did the accountant perform a limited scope audit pursuant to 29 CFR 2520.103-8 and/or 103-12(d)? [X] Yes [ ] No

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: DELOITTE & TOUCHE LLP **(2)** EIN: 13-3891517

d The opinion of an independent qualified public accountant is **not attached** because:

(1) [ ] This form is filed for a CCT, PSA, or MTIA. **(2)** [ ] It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l.

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? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.)	4a		X	
b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)	4b		X	

			Yes	No	Amount
c	Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)	4c		X	
d	Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)	4d		X	
e	Was this plan covered by a fidelity bond?	4e	X		10000000
f	Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	4f		X	
g	Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?	4g		X	
h	Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?	4h		X	
i	Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	4i		X	
j	Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked, and see instructions for format requirements.)	4j		X	
k	Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	4k		X	
l	Has the plan failed to provide any benefit when due under the plan?	4l		X	
m	If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	4m			
n	If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.	4n			

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year? ☐ Yes ☒ No
If "Yes," enter the amount of any plan assets that reverted to the employer this year _____.

5b 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.)

5b(1) Name of plan(s)	**5b(2)** EIN(s)	**5b(3)** PN(s)

5c If the plan is a defined benefit plan, is it covered under the PBGC insurance program (See ERISA section 4021.)? ☒ Yes ☐ No ☐ Not determined
If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 4160121. (See instructions.)

SCHEDULE R (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Retirement Plan Information

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

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2018

This Form is Open to Public Inspection.

For calendar plan year 2018 or fiscal plan year beginning 01/01/2018 and ending 12/31/2018

A Name of plan
LIBBEY INC. SALARIED CASH BALANCE PENSION PLAN

B Three-digit plan number (PN) ▶ 003

C Plan sponsor's name as shown on line 2a of Form 5500
LIBBEY INC.

D Employer Identification Number (EIN)
34-1559357

Part I Distributions

All references to distributions relate only to payments of benefits during the plan year.

1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions **1** 0

2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits):

EIN(s): 22-2784107 16-1481904

Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.

3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year **3** 24

Part II Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)

4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ..... ☐ **Yes** ☒ **No** ☐ **N/A**

If the plan is a defined benefit plan, go to line 8.

5 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 ruling letter granting the waiver. **Date:** Month _____ Day _____ Year _____

If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.

6 **a** Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived) **6a**

b Enter the amount contributed by the employer to the plan for this plan year **6b**

c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount) **6c**

If you completed line 6c, skip lines 8 and 9.

7 Will the minimum funding amount reported on line 6c be met by the funding deadline? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ..... ☐ **Yes** ☐ **No** ☒ **N/A**

Part III Amendments

9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box. ..... ☐ **Increase** ☐ **Decrease** ☐ **Both** ☒ **No**

Part IV ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.

10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan? ..... ☐ **Yes** ☐ **No**

11 **a** Does the ESOP hold any preferred stock? ..... ☐ **Yes** ☐ **No**

b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.) ..... ☐ **Yes** ☐ **No**

12 Does the ESOP hold any stock that is not readily tradable on an established securities market? ..... ☐ **Yes** ☐ **No**

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that contributed more than 5% of total contributions to the plan during the plan year (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify):

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14 Enter the number of participants on whose behalf no contributions were made by an employer as an employer of the participant for:

a The current year	**14a**	
b The plan year immediately preceding the current plan year	**14b**	
c The second preceding plan year	**14c**	

15 Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:

a The corresponding number for the plan year immediately preceding the current plan year	**15a**	
b The corresponding number for the second preceding plan year	**15b**	

16 Information with respect to any employers who withdrew from the plan during the preceding plan year:

a Enter the number of employers who withdrew during the preceding plan year	**16a**	
b If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers	**16b**	

17 If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment. ☐

Part VI Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans

18 If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐

19 If the total number of participants is 1,000 or more, complete lines (a) through (c)

a Enter the percentage of plan assets held as:
Stock: 50.4 % Investment-Grade Debt: 38.9 % High-Yield Debt: _____ % Real Estate: _____ % Other: 10.7 %

b Provide the average duration of the combined investment-grade and high-yield debt:
☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☒ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more

c What duration measure was used to calculate line 19(b)?
☒ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify):

Financial Statements

Libbey Inc. Salaried Cash Balance Pension Plan
Years Ended December 31, 2018 and 2017
Independent Auditors' Report

Employer Identification Number (EIN): 34-1559357
Plan Number: 003

Libbey Inc. Salaried Cash Balance Pension Plan

Financial Statements

Years Ended December 31, 2018 and 2017

Contents

Independent Auditors' Report 1

Financial Statements

Statements of Net Assets Available for Benefits 3

Statements of Changes in Net Assets Available for Benefits 4

Notes to Financial Statements 5

Supplemental Schedules

All schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.

Deloitte.

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INDEPENDENT AUDITORS' REPORT

To the Libbey Inc. Employee Benefits Committee and the
Libbey Inc. Salaried Cash Balance Pension Plan

Report on the Financial Statements

We were engaged to audit the accompanying financial statements of the Libbey Inc. Salaried Cash Balance Pension Plan (the "Plan"), which comprise the statements of net assets available for benefits as of December 31, 2018 and 2017, and the related statements of changes in net assets available for benefits for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on conducting the audit in accordance with auditing standards generally accepted in the United States of America. Because of the matters described in the Basis for Disclaimer of Opinion paragraph, however, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion.

Basis for Disclaimer of Opinion

As permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, the plan administrator instructed us not to perform, and we did not perform, any auditing procedures with respect to the information summarized in Note 5, which was certified by State Street Bank and Trust Company, the trustee of the Plan, except for comparing such information with the related information included in the financial statements. We have been informed by the plan administrator that the trustee holds the Plan's investment assets and executes investment transactions. The plan administrator has obtained certifications from the trustee as of and for the years ended December 31, 2018 and 2017, that the information provided to the plan administrator by the trustee is complete and accurate.

Disclaimer of Opinion

Because of the significance of the matter described in the Basis for Disclaimer of Opinion paragraph, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion. Accordingly, we do not express an opinion on these financial statements.

Report on Form and Content in Compliance With DOL Rules and Regulations

The form and content of the information included in these financial statements, other than that derived from the information certified by the trustee, has been audited by us in accordance with auditing standards generally accepted in the United States of America and, in our opinion, are presented in compliance with the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA.

Deloitte & Touche LLP

September 30, 2019

Libbey Inc. Salaried Cash Balance Pension Plan

Statements of Net Assets Available for Benefits

	December 31,	
	2018	2017
Assets		
Investment in Master Trust, at fair value *(Note 5)*	$ 76,910,607	$ 88,104,562
Net assets available for benefits	$ 76,910,607	$ 88,104,562

See accompanying notes to financial statements.

Libbey Inc. Salaried Cash Balance Pension Plan

Statements of Changes in Net Assets Available for Benefits

	Year Ended December 31,	
	2018	2017
Net investment gain (loss) from Master Trust *(Note 5)*	$ (4,771,740)	$ 12,656,660
Administrative expenses	(238,098)	(274,775)
	(5,009,838)	12,381,885
Benefits paid to participants	(6,184,117)	(8,307,978)
Net increase (decrease)	(11,193,955)	4,073,907
Net assets available for benefits:		
Beginning of year	88,104,562	84,030,655
End of year	$ 76,910,607	$ 88,104,562

See accompanying notes to financial statements.

1. Description of the Plan

The following description of the Libbey Inc. Salaried Cash Balance Pension Plan (the Plan) is provided for general information purposes only. Participants should refer to the summary plan description or plan document for more complete information about the Plan, including the vesting and benefit provisions and the benefit guarantee of the Pension Benefit Guarantee Corporation (PBGC). Copies of these documents are available at the corporate office of Libbey Inc. (the Company, Plan Sponsor, and Plan Administrator).

General

The Plan is a cash balance defined benefit plan established to provide normal and early retirement, termination, and death benefits to salaried employees. Effective January 1, 2006, the Plan was amended to restrict enrollment to new employees. Effective January 1, 2013, the Plan ceased annual company contribution credits to the cash balance accounts. Interest credits continue to accrue. Effective December 31, 2015, the Company merged two other Company defined benefit plans into the Plan to reduce administrative costs. In connection with the merger, the Plan assumed the obligation to pay benefits to the former participants of the two Syracuse China Company merged plans. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1976 (ERISA), as amended.

The Employee Benefits Committee (the Committee) is responsible for the general administration of the Plan. The Committee is comprised of several employees of the Company and reports to the Board of Directors of the Company. The trustee of the Plan is State Street Bank and Trust (State Street).

Benefits

Benefits are calculated based on whether the participant was originally in one of the salaried cash balance pension plans or the union pension plan.

Salaried Cash Balance Pension Plans

Salaried cash balance pension plan participants accrue benefits in a defined notional cash balance account. Interest is credited to participant cash balance accounts based on the beginning of the year balances. The annual interest crediting rate is based on the 30-year U.S. Treasury Securities rate for the month of October immediately preceding the plan year. The Plan has a minimum interest crediting rate of 5% and a maximum crediting rate of 10%. Participant cash balance accounts were also credited on an annual basis with a percentage of their eligible earnings, with the percentage determined based on age and service, as defined by the Plan, until January 1, 2013 (for original Libbey Inc. salaried participants) or April 9, 2009 (for original Syracuse China Company salaried participants).

A participant is entitled to pension benefits beginning at normal retirement age (65) primarily based upon levels of compensation and years of service under the Plan. Benefits are paid at the option of the participant in the form of a lump sum or recurring payments. Accrued benefits become vested after completion of three years of credited service or the attainment of normal retirement age. Benefits are payable beginning at normal retirement age or in reduced amounts upon early retirement. Participants 55 years of age or older with five or more years of credited service are entitled to early retirement benefits. Retirement benefits are based on the immediate cash balance account determined as of the participant's pension starting date. Benefits are also payable upon disability or death.

Union Pension Plan

Participants of the legacy Syracuse China Company Union Pension Plan, a traditional defined benefit plan, accrue benefits based on credited service times a per month amount specified in the collective bargaining agreement.

These participants are entitled to pension benefits beginning at normal retirement age (65) based on a benefit formula amount stipulated by union class in the applicable union contract multiplied by the participant's years of credited service under the Plan. Benefits are paid to the participant in the form of a recurring payment. Accrued benefits become vested after completion of five years of credited service or the attainment of normal retirement age. Benefits are payable beginning at normal retirement age or in reduced amounts upon early retirement and the completion of 15 years of credited service. Benefits are also payable upon disability or death.

Funding

The Company contributes such amounts as are necessary to provide assets sufficient to meet the benefits to be paid to participants and satisfy the ERISA minimum funding requirements. The Plan has met the ERISA minimum funding requirements for 2018 and 2017.

Plan Termination

Although it has not expressed any intention to do so, the Company has the right under the Plan, in certain circumstances, to discontinue its contributions at any time and to terminate the Plan subject to the provisions set forth in ERISA. In the event that the Plan is terminated, the net assets of the Plan will be allocated for payment of plan benefits to the participants in an order of priority determined in accordance with ERISA, applicable regulations thereunder, and the Plan document.

Certain benefits under the Plan are insured by the PBGC if the Plan terminates. Generally, the PBGC guarantees most vested normal age retirement benefits, early retirement benefits, and certain disability and survivor's pensions. However, the PBGC does not guarantee all types of benefits under the Plan, and the amount of benefit protection is subject to certain limitations. Vested benefits under the Plan are guaranteed at the level in effect on the date of the Plan's termination, subject to a statutory ceiling on the amount of an individual's monthly benefit.

Whether all participants receive their benefits, should the Plan be terminated at some future time, will depend on the sufficiency, at that time, of the Plan's net assets to provide those benefits, the priority of those benefits to be paid, and the level and type of benefits guaranteed by the PBGC at that time. Some benefits may be fully or partially provided for by the then-existing assets and the PBGC guaranty, while other benefits may not be provided for at all.

2. Significant Accounting Policies

Basis of Accounting

The accompanying financial statements of the Plan have been prepared using the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP).

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Most significantly, estimates are used in determining the actuarial present value of accumulated plan benefits and in determining the fair value of investments (see Note 3 and 4 for further details). Actual results could differ from those estimates.

Investment Valuation and Income Recognition

The Plan's assets are stated at fair value and are included in the Master Trust along with the assets of another pension plan of the Company. Each participating plan has an undivided interest in the Master Trust. The Master Trust assets are allocated among both plans by assigning to each plan those transactions (primarily contributions, benefit payments, and plan-specific expenses) that can be specifically identified and by allocating among both plans, in proportion to each plan's beneficial interest in the Master Trust, income and expenses resulting from the collective investment of the assets of the Master Trust. The Master Trust holds an investment in the Harbor Capital Group Trust for Defined Benefit Plans (Group Trust). The Group Trust is under a separate trust agreement, along with the assets of other third party pension plans. Fair value is defined as the price that would be received to sell an asset or

paid to transfer a liability in an orderly transaction between market participants at the measurement date (i.e., an exit price). See Note 3 for further details.

Earnings of the Group Trust are allocated to each plan based on the relative market values of each plan's net assets. These financial statements reflect the Plan's total interest in the net assets and transactions of the Group Trust as allocated by the trustee and any such other investments and transactions related solely to the Plan. This Group Trust is designed to diversify risk by investing in a variety of asset classes including: domestic and foreign corporate equity and debt issues, government securities and real estate investment trusts.

The Master Trust also holds investments in hedge funds and short-term investments. The hedge funds are multi-strategy hedge funds. The investment objective is to achieve long-term equity-like returns with significantly less volatility than the equity markets. The Master Trust seeks to accomplish this investment objective by investing in a diversified portfolio of hedge funds.

The Committee is responsible for determining the Plan's valuation policies and analyzing information provided by the investment custodians and issuers that is used to determine the fair value of the Plan's investments. In addition, the Committee determines guidelines for the long-term asset allocation of the Master Trust while considering diversification and pension plan liability structure. The diversified asset allocation is intended to maintain an appropriate balance of risk and return.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded as earned. Dividends are recorded on the ex-dividend date. Net appreciation (depreciation) includes the Plan's gains and losses on investments bought and sold, as well as held during the year.

Payment of Benefits

Benefits are recorded when paid.

3. Fair Value of Investments

Our investment valuation policy is to state the investments at fair value. Substantially all investments are valued at their respective net asset value (NAV) as a practical expedient and calculated by the trustee, except for certain hedge fund investments valued at NAV (not as a practical expedient). Valuation techniques and inputs used to measure fair value are as follows:

Short-term investments - valued using NAV as a practical expedient.

Group Trust - valued at the unit prices established by the trustee, also referred to as NAV as a practical expedient. The underlying securities in the Group Trust include real estate funds, equity securities and fixed income investments. The underlying securities in the Group Trust are valued as follows:

> **Real estate funds** - valued based on valuation of the fund as determined by periodic appraisals of the underlying investments owned by the respective fund.
>
> **Equity securities** - valued at the last reported readily available sales price on their principal exchange on the valuation date or official close for certain markets.
>
> **Fixed income investments** - valued on a basis of valuations furnished by a trustee-approved pricing service, which determines valuations for normal institutional-size trading units of such securities which are generally recognized at fair value as determined in good faith by the trustee.

Hedge Funds - valued primarily using NAV as a practical expedient by applying estimated month-end NAV and performance numbers provided by the fund administrator.

Restrictions on redemption - The plan is required to provide a month's advance written notice to liquidate its entire share in the Group Trust. Certain investments in the hedge funds can only be liquidated on either a quarterly or semi-annual basis, require advance notification and are subject to audit holdback provisions.

All investments measured at NAV as a practical expedient for fair value have been excluded from the fair value hierarchy, in accordance with U.S. GAAP. The table below presents the Master Trust investments at fair value as of December 31.

	Measured at NAV as a practical expedient	
	2018	2017
Master Trust investments:		
Short-term investments	$ 9,796,057	$ 8,061,494
Hedge funds	33,058,097	36,662,933
Investment in Group Trust:		
Real estate	6,197,754	16,389,909
Equity securities	108,951,876	156,434,011
Debt securities	146,079,872	125,671,236
Total	$ 304,083,656	$ 343,219,583

During the second half of 2018, the Committee approved an asset re-allocation to de-risk Plan assets. Certain investments in real estate and equity securities were transferred to less volatile debt securities.

See Note 5 for further information as to the Plan's interest in the Master Trust and the Group Trust.

4. Accumulated Plan Benefits

Accumulated plan benefits are those estimated future periodic payments, including lump-sum distributions, that are attributable under the Plan's provisions to service rendered by the employees at the valuation date. Accumulated plan benefits include benefits expected to be paid to (a) retired or terminated vested employees or their beneficiaries and (b) present employees or their beneficiaries.

The Plan's actuary estimates the actuarial present value of accumulated plan benefits, which is the amount that results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of benefit payments (by means of decrements for such factors as death, withdrawal, or early retirement) between the valuation date and the expected date of payment.

The significant assumptions underlying the actuarial valuation (as of and for the years ended December 31, 2017 and 2016) are:

Assumed rate of return	2017 - 7.00% annually 2016 - 7.00% annually
Mortality basis	2017 - RP-2014 Sex Distinct Mortality Table (with generational projection scale MP 2017) 2016 - RP-2014 Sex Distinct Mortality Table (with generational projection scale MP 2016)
Retirement age	Based on company experience varying from ages 55 to 70
Actuarial cost method	Projected unit credit

These actuarial assumptions are based on the presumption that the Plan will continue. If the Plan were to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits.

The accumulated plan benefit information as of December 31, 2017 is as follows:

Actuarial present value of accumulated plan benefits:	
Vested benefits:	
Participants currently receiving benefits	$ 29,476,935
Other participants	31,920,213
Non-vested benefits	727,755
Total	$ 62,124,903

The non-vested benefits above are attributable to early retirement subsidies for active participants who are assumed to retire early with subsidized retirement benefits.

Changes in the present value of accumulated plan benefits are as follows:

Actuarial present value of accumulated plan benefits as of December 31, 2016	$ 65,799,562
Decrease attributable to:	
Actuarial losses	844,221
Interest due to decrease in the discount period	4,202,718
Benefits paid	(8,307,978)
Assumption changes	(413,620)
Net decrease	(3,674,659)
Actuarial present value of accumulated plan benefits as of December 31, 2017	$ 62,124,903

5. Investment in Master Trust - Information Certified by Trustee

Certain information related to investments for the Plan and the Master Trust in the accompanying financial statements as of December 31, 2018 and 2017, as well as the Plan's share of net investment gain (loss) from the Master Trust for the years then ended, was obtained or derived from information provided to the Plan Administrator. At December 31, 2018 and 2017, the Plan's interest in the net assets of the Master Trust was approximately 25.3% and 25.7%, respectively.

The following table presents the fair value of the investments for the Master Trust at December 31:

	2018	2017
Master Trust:		
Short-term investments	$ 9,796,057	$ 8,061,494
Hedge funds*	33,058,097	36,662,933
Group Trust	261,229,502	298,495,156
Total	$ 304,083,656	$ 343,219,583
Plan's value of interest in the Master Trust:		
Short-term investments	$ 2,477,676	$ 2,069,388
Hedge funds*	8,361,245	9,411,385
Group Trust	66,071,686	76,623,789
Total	$ 76,910,607	$ 88,104,562

* State Street's certification does not apply to these assets.

Investment gain (loss) from the Master Trust is as follows for the years ended December 31:

	2018	2017
Net appreciation (depreciation) in fair value of investments*	$ (19,403,829)	$ 47,627,752
Interest and dividend income*	623,626	847,073
Net investment gain (loss) in the Master Trust	$ (18,780,203)	$ 48,474,825
Plan's share of net appreciation (depreciation) from the Master Trust*	$ (4,929,915)	$ 12,438,631
Plan's share of interest and dividend income from the Master Trust*	158,175	218,029
Plan's share of net investment gain (loss) from the Master Trust	$ (4,771,740)	$ 12,656,660

* Information was certified as complete and accurate by State Street and is unaudited with the exception of net appreciation (depreciation) and interest and dividend income related to the hedge funds, which was immaterial.

See Note 3 for further information on the fair value measurements of the Plan's investments which is also unaudited except for information related to hedge funds.

Administrative expenses of the Master Trust are as follows for the years ended December 31:

	2018	2017
Administrative expenses of the Master Trust	$ (754,083)	$ (879,772)
Plan's share of administrative expenses from the Master Trust	$ (238,098)	$ (274,775)

6. Income Tax Status

The Plan has received a determination letter from the Internal Revenue Service (IRS) dated February 4, 2014, stating that the Plan is qualified under Section 401(a) of the Internal Revenue Code (the Code) and, therefore, the related trust is tax-exempt. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualified status. The Plan Administrator believes the Plan operates in compliance with the applicable requirements of the Code and, therefore, believes the Plan is qualified and the related trust is tax-exempt.

Accounting principles generally accepted in the United States require plan management to evaluate uncertain tax positions taken by the Plan. The financial statement effects of a tax position are recognized when the position is more likely than not, based on the technical merits, to be sustained upon examination by the IRS. The Plan Administrator has analyzed the tax positions taken by the Plan and has concluded that as of December 31, 2018, there are no uncertain positions taken or expected to be taken. The Plan has recognized no interest or penalties related to uncertain tax positions. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan Administrator believes the Plan is no longer subject to income tax examinations for years prior to 2015.

In September 2017, the Company filed an application with the IRS for a compliance statement under the IRS's Voluntary Correction Program (VCP), seeking IRS approval of the method in which the Company has corrected or proposed to correct compliance issues it discovered in the administration of the Plan. In June 2018, the IRS approved the VCP application as originally submitted. These issues included incorrect calculations of certain benefits paid in the form of a level income option, incorrect calculations of certain benefits paid in the form of joint and survivor/contingent annuitant options, failure to make required minimum distributions, failure to actuarially adjust certain late retirement pensions for delayed commencement dates, and failure to timely execute a plan amendment within the first 90 days after receipt of the most recent IRS determination letter. The Company took proactive steps to resolve these matters and filed the plan amendment with the IRS. Additionally, the Company corrected benefit payments and notified affected participants of the corrections. The impact of these compliance issues have been reflected in the Plan financial statements.

7. Transactions With Parties in Interest

Certain of the Plan’s assets are invested in funds managed by the primary investment manager of the Plan's assets. These transactions qualify as party-in-interest transactions; however, they are exempt from the prohibited transaction rules under ERISA.

8. Risks and Uncertainties

The Master Trust invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the statements of net assets available for benefits.

The Plan’s contributions are made and the actuarial present value of accumulated plan benefits is reported based on certain assumptions pertaining to interest rates, inflation rates, and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimation and assumption processes, it is at least reasonably possible that changes in these estimates and assumptions in the near term could materially affect the amounts reported and disclosed in the financial statements.

9. Administrative Expenses

The Plan incurs administrative expenses directly related to the Plan, which consist primarily of PBGC fees, actuarial fees, investment consulting, and system administration, including expenses related to the Master Trust which are allocated to the Plan. Expenses relating to purchases, sales, or transfers of the Plan’s investments are charged to the particular investment fund to which the expenses relate and are reflected in the net investment gain (loss) from Master Trust. All other administrative expenses are paid by the Company on behalf of the Plan. See Note 5 for the administrative expenses incurred by the Master Trust and the Plan's share of these administrative expenses.

10. Subsequent Events

Management evaluated subsequent events for the Plan through September 30, 2019, the date the financial statements were available to be issued.

Plan Name	**Libbey Inc. Hourly Retirement Plan**
Plan Sponsor EIN	**34-1559357**
ERISA Plan #	**004**
Plan Year Ending	**12/31/2018**

The required attachment marked with an "X" in the Attachment column is included within the "Signed Schedule MB or Schedule SB" attachment to Schedule SB location which consists of the entire Schedule SB and its attachments.

Form / Schedule	Line#	Description	Attachment Title (if different from Description)	Attach-ment
5500 Sch. SB	**None**	Statement by Enrolled Actuary		**x**
5500 Sch. SB	**Line 27**	Actuarial Information Based on Pre-PPA Funding Rules		
5500 Sch. SB	**Line E**	Information for Each Individual Employer		
5500 Sch. SB	**Line 4**	Additional Information for Plans in At-Risk Status		
5500 Sch. SB	**Line 7**	Explanation of Discrepancy in Prior Year Funding Standard Carryover Balance or Prefunding		
5500 Sch. SB	**Line 8**	Late Election to Apply Balances to Quarterly Installments		
5500 Sch. SB	**Line 9**	Explanation of Credit Balance Discrepancy		
5500 Sch. SB	**Line 18**	Contributions Made to the Plan for the Plan Year		
5500 Sch. SB	**Line 19**	Discounted Employer Contributions		
5500 Sch. SB	**Line 20c**	Liquidity Requirement Certification		
5500 Sch. SB	**Line 22**	Description of Weighted Average Retirement Age		x
5500 Sch. SB	**Line 23**	Information on Use of Multiple Mortality Tables		
5500 Sch. SB	**Line 23**	Information on Use of Substitute Mortality Tables		
5500 Sch. SB	**Part V**	Statement of Actuarial Assumptions/Methods		x
5500 Sch. SB	**Part V**	Summary of Plan Provisions		x
5500 Sch. SB	**Line 24**	Change in Actuarial Assumptions		
5500 Sch. SB	**Line 25**	Change in Method		
5500 Sch. SB	**Line 26**	Schedule of Active Participant Data		x
5500 Sch. SB	**Line 27**	Balances Subject to Binding Agreement with PBGC		
5500 Sch. SB	**Line 27**	Alternative 17-Year Funding Schedule of Airlines		
5500 Sch. SB	**Line 32**	Schedule of Amortization Bases		
5500 Sch. SB		Other Attachment [Enter Description]		

Plan Name	**Libbey Inc. Hourly Retirement Plan**
Plan Sponsor EIN	**34-1559357**
ERISA Plan #	**004**
Plan Year Ending	**12/31/2018**

The required attachment marked with an "X" in the Attachment column is included within the "Signed Schedule MB or Schedule SB" attachment to Schedule SB location which consists of the entire Schedule SB and its attachments.

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5500 Sch. SB	**Line 32**	Schedule of Amortization Bases		
5500 Sch. SB		Other Attachment [Enter Description]		

SCHEDULE SB (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Single-Employer Defined Benefit Plan Actuarial Information

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.**

OMB No. 1210-0110

2018

This Form is Open to Public Inspection

For calendar plan year 2018 or fiscal plan year beginning 01/01/2018 and ending 12/31/2018

▶ **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
LIBBEY INC. SALARIED CASH BALANCE PENSION PLAN

B Three-digit plan number (PN) ▶ 003

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF
LIBBEY INC.

D Employer Identification Number (EIN)
34-1559357

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

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

Part I Basic Information

1 Enter the valuation date: Month 01 Day 01 Year 2018

2 Assets:

a Market value	**2a**	88,104,562
b Actuarial value	**2b**	83,051,192

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	666	33,083,185	33,083,185
b For terminated vested participants	467	18,727,956	18,727,956
c For active participants	259	18,519,128	18,970,129
d Total	1,392	70,330,269	70,781,270

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**	5.61%
6 Target normal cost	**6**	234,313

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

ANDREW E. DUNN AED
Signature of actuary

9/17/2019
Date

Andrew E. Dunn
Type or print name of actuary

1707908
Most recent enrollment number

Willis Towers Watson US LLC
Firm name

216-937-4000
Telephone number (including area code)

1001 Lakeside Avenue
Suite 1500
Cleveland OH 44114-1172
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 15.82%	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)		0
	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 5.81%		0
	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		0
	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	117.33%
15	Adjusted funding target attainment percentage	15	117.33%
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	124.80%
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
			Totals ▶ 18(b)	0	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	0

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☒ No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ 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:	
4.16 %	5.72 %	6.48%	☐ N/A, full yield curve used

b Applicable month (enter code)	**21b**	4
22 Weighted average retirement age	**22**	63

23 Mortality table(s) (see instructions)

Prior regulation: ☐ Prescribed - combined ☐ Prescribed - separate ☐ Substitute

Current regulation: ☐ 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.	☐ Yes	☒ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	☐ Yes	☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	☒ 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**	234,313
b Excess assets, if applicable, but not greater than line 31a	**31b**	234,313

32 Amortization installments:

	Outstanding Balance	Installment
a Net shortfall amortization installment	0	0
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**	0

	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**	0
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	0
38 Present value of excess contributions for current year (see instructions)		
a Total (excess, if any, of line 37 over line 36)	**38a**	0
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 ATTACHMENTS

Schedule SB – Statement by Enrolled Actuary

Plan Sponsor	Libbey Inc.
EIN/PN	34-1559357/003
Plan Name	Libbey Inc. Salaried Cash Balance Pension Plan
Valuation Date	January 1, 2018
Enrolled Actuary	Andrew E. Dunn
Enrollment Number	17-07908

The actuarial assumptions that are not mandated by IRC § 430 and regulations, represent the enrolled actuary's best estimate of anticipated experience under the plan, subject to the following conditions:

The actuarial valuation, on which the information in this Schedule SB is based, has been prepared in reliance upon the employee and financial data furnished by the plan administrator and the trustee. The enrolled actuary has not made a rigorous check of the accuracy of this information but has accepted it after reviewing it and concluding it is reasonable in relation to similar information furnished in previous years. The amounts of contributions and dates paid shown in Item 18 of Schedule SB were listed in reliance on information provided by the plan administrator and/or trustee.

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 22
Description of Weighted Average Retirement Age
as of January 1, 2018

The average retirement age for Line 22 was calculated by determining the average age at retirement for those current active participants expected to reach retirement, based on all current decrements assumed.

(1) Retirement Age	(2) Assumed Retirement Rate	(3) Number of Participants at Beginning	(4) Number of Participants Retiring (2) * (3)	(5) Product for Weighting (1) * (4)
55	0.060	1,000.00	60.00	3,300.00
56	0.025	940.00	23.50	1,316.00
57	0.025	916.50	22.91	1,305.87
58	0.040	893.59	35.74	2,072.92
59	0.050	857.84	42.89	2,530.51
60	0.080	814.95	65.20	3,912.00
61	0.100	749.76	74.98	4,573.78
62	0.100	674.78	67.48	4,183.76
63	0.100	607.30	60.73	3,825.99
64	0.100	546.57	54.66	3,498.24
65	0.350	491.91	172.17	11,191.05
66	0.350	319.74	111.91	7,386.06
67	0.250	207.83	51.96	3,481.32
68	0.250	155.88	38.97	2,649.96
69	0.250	116.91	29.23	2,016.87
70	1.000	87.68	87.68	6,137.60
			1,000.00	63,381.93

Weighted Average Retirement Age: 63,381.25 / 1,000.00 = 63.38

Plan Name: Libbey Inc. Salaried Cash Balance Pension Plan
EIN / PN: 34-1559357/003
Plan Sponsor: Libbey Inc.
Valuation Date January 1, 2018

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 26
Schedule of Active Participant Data as of January 1, 2018

	Attained Years of Credited Service[1]									
Attained Age	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over
Under 25	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	2	0	0	0	0	0	0	0	0
35-39	0	0	13	0	0	0	0	0	0	0
40-44	0	1	14	9	3	0	0	0	0	0
45-49	0	1	12	14	11	4	0	0	0	0
50-54	0	0	10	21	14	16	2	0	0	0
55-59	0	0	5	9	7	10	13	8	2	0
60-64	0	1	4	7	6	2	3	16	7	1
65-69	0	0	1	4	2	0	1	1	0	2
70 & over	0	0	0	0	0	0	0	0	0	0

[1] Age and service for purposes of determining category are based on exact (not rounded) values.

Plan Name: Libbey Inc. Salaried Cash Balance Pension Plan
EIN / PN: 34-1559357/003
Plan Sponsor: Libbey Inc.
Valuation Date January 1, 2018

SCHEDULE SB ATTACHMENTS

Schedule SB, Part V
Statement of Actuarial Assumptions/Methods

Economic Assumptions

Interest rate basis		
Applicable month	September	
Interest rate basis	Segment Rates	
Interest rates:	Reflecting Stabilization	Not Reflecting Stabilization
■ First segment rate	4.16%	1.75%
■ Second segment rate	5.72%	3.76%
■ Third segment rate	6.48%	4.66%
■ Effective Interest Rate	5.61%	3.92%
Annual rates of increase		
■ Compensation	N/A	
■ Cash balance interest rate credit	5.50%	
■ Future Social Security wage bases	4.00%	
Plan related expenses	Prior year expenses, adjusted according to expectations	

SCHEDULE SB ATTACHMENTS

Demographic Assumptions

Inclusion date	The valuation date coincident with or next following the date on which the employee becomes a participant.
New or rehired employees	It was assumed there will be no new or rehired employees.
Mortality	
■ Healthy	Separate rates for non-annuitants (based on RP-2014 “Employees” table without collar or amount adjustments, adjusted backward to 2006 with MP-2014, and then projected forward with a static projection as specified in the regulations under §1.430(h)(3)-1 using Scale MP-2016) and annuitants (based on RP-2014 “Healthy Annuitants” table without collar or amount adjustments, adjusted backward to 2006 with MP-2014, and then projected forward with a static projection as specified in the regulations under §1.430(h)(3)-1 using Scale MP-2016).
■ Disabled	Same as healthy mortality.
Termination	Rates varying by age. Sample rates:

Libbey Salary	
Attained Age	**Rate**
25	0.1296
40	0.0415
55	0.0088

SCHEDULE SB ATTACHMENTS

Disability incidence

Rates varying by age. Sample rates:

Libbey Salary	
Attained Age	**Rate**
25	0.0010
40	0.0015
55	0.0095

Retirement

Rates varying by age.

Libbey Salary			
Age	**Rate**	**Age**	**Rate**
55	6.00%	60	8.00
56	2.50	61 - 64	10.00
57	2.50	65 – 66	35.00
58	4.00	67 – 69	25.00
59	5.00	70	100.00

Benefit commencement date:

- Preretirement death benefit — The later of the death of the active participant or the date the participant would have attained age 55.
- Deferred vested benefit — Age 65.
- Disability benefit — Upon disablement.
  - Retirement benefit — Upon termination of employment.

SCHEDULE SB ATTACHMENTS

Form of payment	Approximately 90% of eligible participants are assumed to elect a lump sum; remainder are assumed to elect a life annuity. Lump sums were valued using the substitution of annuity form under IRS Regulation §1.430(d)-1(f)(4) without application of generational mortality. Annuities were calculated from the cash balance accounts using the required methodology in IRS Regulation §1.430(d)-1(f)(5).
Percent married	80% of participants. Used to value pre-retirement surviving spouse benefits.
Spouse age	Wife three years younger than husband.
Covered pay	N/A
Administrative expenses	Target normal cost loaded with prior year expenses ($234,313 for Libbey Salary), adjusted according to expectations.
Timing of benefit payments	Annuity payments are payable monthly at the beginning of the month and lump sum payments are payable on date of decrement.

Methods

Valuation date	First day of plan year.
Funding target	Present value of accrued benefits as required by regulations under IRC §430.
Target normal cost	Present value of benefits expected to accrue during plan year plus plan-related expenses expected to be paid from plan assets during plan year as required by regulations under IRC §430.

SCHEDULE SB ATTACHMENTS

Actuarial value of assets	Average of the fair market value of assets on the valuation date and the two immediately preceding valuation dates, adjusted for contributions, benefits, administrative expenses and expected earnings (with such expected earnings limited as described in IRS Notice 2009-22). The average asset value must be within 10% of fair value, including discounted contributions receivable (discounted using the effective interest rate for the 2017 plan year). The method of computing the actuarial value of assets complies with rules governing the calculation of such values under the Pension Protection Act of 2006 (PPA). These rules produce smoothed values that reflect the underlying market value of plan assets but fluctuate less than the market value. As a result, the actuarial value of assets will be lower than the market value in some years and greater in other years. However, over the long term under PPA's smoothing rules, the method has a bias to produce an actuarial value of assets that is below the market value of assets.
Benefits not valued	Benefits for participants who have terminated without vested rights, but may be rehired, were not valued. The preretirement survivor annuity for terminated vested participants was not explicitly valued. The enhanced retirement benefit was not valued.

Assumptions Rationale — Significant Economic Assumptions for Contributions

Discount rate	The basis chosen was selected by the plan sponsor from among choices prescribed by law, all of which are based on observed market data over certain periods of time.
Expected return on plan assets	We understand that the expected return on assets assumption reflects the plan sponsor's estimate of future experience for trust asset returns, reflecting the plan's current asset allocation and any expected changes during the current plan year, current market conditions and the plan sponsor's expectations for future market conditions. In addition, this assumption is net of investment and administrative expenses paid from the trust.
Cash balance interest crediting rate	The Plan credits interest to cash balance accounts using the greater of the 30-year Treasury rate and 5%. The plan sponsor has selected an expected future interest crediting rate of 5.50% for 2018 After examining historical variability in this rate, we believe that the selected assumption does not significantly conflict with what would be reasonable based on a combination of market conditions at the measurement date and future expectations consistent with other economic assumptions used, other than the discount rate.

SCHEDULE SB ATTACHMENTS

Lump sum conversion rate	As required by IRC §430, lump sum benefits are valued using “annuity substitution”, so that the interest rates assumed are effectively the same as described above for the discount rate.
Annuity conversion rate	As required by IRC §430, annuity benefits are valued by converting accounts to annuities using the current IRC §430 interest rates, so that the interest rates assumed are effectively the same as described above for the discount rate
Administrative expenses	Administrative expenses are estimated by determining the actual expenses paid from the trust the preceding year for the pension plans, adjusted according to expectations.

Assumptions Rationale — Significant Demographic Assumptions

Healthy mortality	Assumptions were selected by the plan sponsor from among choices prescribed by law and represent a best estimate of future experience.
Disabled mortality	Assumptions were selected by the plan sponsor from among choices prescribed by law and represent a best estimate of future experience.
Termination	This assumption was selected based on the plan sponsor’s best estimate of future experience. In addition, this assumption has not been a significant source of actuarial gain/loss in recent years.
Disability	This assumption was selected based on the plan sponsor’s best estimate of future experience. In addition, this assumption has not been a significant source of actuarial gain/loss in recent years.
Retirement	This assumption was selected based on the plan sponsor’s best estimate of future experience. In addition, this assumption has not been a significant source of actuarial gain/loss in recent years.

Source of Prescribed Methods

Funding methods	The methods used for funding purposes as described herein, including the method of determining plan assets, are “prescribed methods set by law”, as defined in the actuarial standards of practice (ASOPs). These methods are required by IRC §430, or were selected by the plan sponsor from a range of methods permitted by IRC §430.

SCHEDULE SB ATTACHMENTS

Changes in Assumptions and Methods

Change in assumptions since prior valuation	The funding interest rate basis was changed from the segment interest rates as of September 2016 to the segment interest rates as of September 2017. This valuation reflects the updated static mortality tables provided in final regulations under IRC §430 issued in October 2017 as well as the change in the "applicable mortality table" under IRC §417(e) provided in IRS Notice 2017-60.
Changes in methods since prior valuation	None.

SCHEDULE SB ATTACHMENTS

Schedule SB, Part V
Schedule SB, Part V – Summary of Plan Provisions

Plan Provisions

Name of plan	Libbey Inc. Salaried Cash Balance Pension Plan
Effective date	June 24, 1993
Amended and restated	January 1, 2013
Eligible employees	Employees of Libbey Glass Inc., Traex and World Tableware Inc., excluding collectively bargained employees, leased employees, temporary employees and employees of Drummond Glass Company of Syracuse China Company and employees hired after December 31, 2005.
Participation date	January 1 or July 1 coincident with or next following the first anniversary of the person's Employment Date.

Definitions

Service	■ Years and months of service in eligible class from Employment Date to December 31, 2012. ■ Includes service under the 1997 Plan through December 31, 1997. ■ Disabled Employees continue to earn service.
Pensionable pay	Compensation paid by an Employer as defined in the Plan: base salary including overtime pay, production schedule premium payments, incidental payments made in addition to base salary attributed to performance, shift differential, goal sharing, bonus and other incentive payments in the year paid plus 401(k) and Section 125 deferrals.
Social Security benefit	The amount of earning subject to the FICA Social Security tax in effect at beginning of the Plan Year.
Normal retirement date (NRD)	First of month on or after the attainment of age 65.

SCHEDULE SB ATTACHMENTS

Opening account balance

For a participant on December 31, 1997, who is an active employee on January 1, 1998: single sum amount equal to 100% of the current value of the Accrued Benefit under the 1997 Plan at December 31, 1997, based on NRD (or if age 65 or older, December 31, 1997) and the actuarial assumptions in Appendix A of the plan document, including 7.00% interest and the 1983 GAM (unisex) mortality table (post-65 only).

Annual cash balance contribution

For each Plan Year after January 1, 1998 through December 31, 2012, the Annual Cash Balance contribution equals Compensation times Contribution Percentage from schedule:

Contribution Percentage Schedule

Sum of age and years of Service	Contribution percentage of compensation under Social Security Wage Base	Contribution percentage of compensation at or above Social Security Wage Base
0 but less than 30	1.5%	3.0%
30 but less than 34	1.7	3.4
34 but less than 38	1.9	3.8
38 but less than 42	2.1	4.2
42 but less than 46	2.3	4.6
46 but less than 50	2.7	5.4
50 but less than 60	3.2	6.4
60 but less than 70	4.0	8.0
70 but less than 80	5.5	11.0
80 but less than 90	7.0	12.7
90 and over	9.0	14.7

Interest credits

Rates: 30-year Treasury Securities rate in effect as of the month of October (September average) of preceding Plan Year.

Minimum: 5%
Maximum 10%

Applied on last day of Plan Year to Cash Balance Account amount as of first date of each Plan Year.

SCHEDULE SB ATTACHMENTS

Immediate cash balance account annuity	Annual amount of retirement income calculated as: (a) Cash Balance Account divided by (b) Immediate annuity factor for one dollar of annual benefit under a life annuity option, based on actuarial assumptions in Appendix A of the plan document and age at pension starting date.
Deferred cash balance account annuity	Projected annual amount that would be payable on NRD determined by: (a) Current Cash Balance Account projected at interest rate equal to Interest Credit compounded annually for number of years and months to NRD divided by (b) Immediate annuity factor for one dollar of annual benefit under a life annuity option, based on actuarial assumptions in Appendix A of the plan document at Normal Retirement Age.
Pension benefit	Greater of: (a) Immediate Cash Balance Account Annuity or (b) Minimum Accrued Benefit (set forth below)

Eligibility for Benefits

Normal retirement	Retirement on NRD.
Early retirement	Retirement before NRD and on or after both attaining age 55 and completing three years of service.
Postponed retirement	Retirement after NRD.
Deferred vested retirement	Termination for reasons other than death, disability or retirement after completing three years of service.
Preretirement death	Death while vested and prior to receive a retirement benefit. Benefit may be paid to spouse or other beneficiary.

SCHEDULE SB ATTACHMENTS

Benefits Paid Upon the Following Events	
Normal retirement	Pension benefit as of NRD.
Early retirement	Pension benefit as of early retirement date.
Postponed retirement	Pension benefit as of postponed retirement date.
Deferred vested termination	Pension benefit as of early retirement date or later.
Preretirement death	Pension benefit as of death date payable as immediate annuity or lump sum (a surviving spouse may choose to defer payment). Benefit to spouse shall not be less than actuarial equivalent of 50% joint and survivor annuity amount.
Payment forms	Single life, 50%, 75% or 100% Joint and Survivor, Lump Sum, Level Income Payment forms are calculated using conversion factors generally assuming the 1983 Group Annuity Mortality Unisex table for both the participant and the beneficiary and 7.00% interest. Spousal consent is required if a married participant chooses any option other than joint and survivor annuity.
Maximum on benefits and pay	All benefits and pay for any calendar year may not exceed the maximum limitations for that year as defined in the Internal Revenue Code. The plan provides for increasing the dollar limits automatically as such changes become effective.

Minimum Accrued Benefit	

Eligible employees	■ Libbey Glass Inc. employee at December 31, 1997.
	■ As of December 31, 1997:
	  ■ Age 45
	  ■ Ten or more years of Service
	  ■ Combined age and years of Service equal 65 or more.

Duration	For years 1998 through 2007.

Plan Name:	Libbey Inc. Salaried Cash Balance Pension Plan
EIN / PN:	34-1559357/003
Plan Sponsor:	Libbey Inc.
Valuation Date	January 1, 2018

SCHEDULE SB ATTACHMENTS

Definitions for Minimum Accrued Benefits

Average earnings	The average of the highest three consecutive calendar years of pensionable pay before 2008.
Pension benefit	1.212% of Average Earnings plus 0.176% of Average Earnings in excess of the Social Security Wage Base for each year of Service not in excess of 35, plus 0.5% of Average Earnings for each year of Service in excess of 35. The minimum benefit is $192 for each year of Service.

Eligibility for Minimum Accrued Benefits

Early retirement	Retirement before NRD and on or after both attaining age 55 and completing ten years of Service.
Preretirement death	Death while eligible for normal, early, postponed or deferred vested retirement benefits, with a surviving spouse.
Enhanced retirement	Retirement due to reduction in force (as described in Appendix B of the Plan) or change in organization or operation while eligible for Minimum Accrued Benefit.

Monthly Minimum Accrued Benefits Paid Upon the Following Events

Normal retirement	Pension benefit as of NRD.
Early retirement	Pension benefit as of early retirement date, reduced 5/12^{ths} of 1% for each month by which the participant's early retirement date precedes age 60. If the participant has at least 30 years of Service, early retirement benefits are unreduced.
Postponed retirement	Pension benefit as of actual retirement date.
Deferred vested retirement	Pension benefit as of termination date, reduced by actuarial equivalent factors if payments commence before the participant's NRD.

Plan Name:	Libbey Inc. Salaried Cash Balance Pension Plan
EIN / PN:	34-1559357/003
Plan Sponsor:	Libbey Inc.
Valuation Date	January 1, 2018

SCHEDULE SB ATTACHMENTS

Preretirement death	25% of the participant's base salary as of the date of death for participants who are at least 35 years of age and have at least five years of Service. For participants under 35 years of age who have at least five years of Service, the benefit is equal to 50% of the pension benefit reduced for the 50% joint and survivor election and reduced for payment as early as the participant's 55th birthday. May be elected in lieu of cash balance account.
Enhanced retirement	Monthly pension benefit determined with special early retirement factors (found in Appendix B of Plan).
Payment forms	Single Life, 50%, 75% or 100% Joint and Survivor, Lump Sum, Level Income Spousal consent is required if a married participant chooses any option other than joint and survivor annuity.

Plan Provisions Effective After January 1, 2018

No future plan provisions were recognized in determining minimum and maximum contributions.

Changes in Plan Provisions Since Prior Year

The plan was amended during 2017 to allow for participants to commence their benefits upon reaching normal retirement age while still employed with the Company.

Significant Events

None.

SCHEDULE SB ATTACHMENTS

Plan Provisions	
Name of prior plan	Syracuse China Company Salaried Cash Balance Pension Plan (merged into the Libbey Salary Plan effective December 31, 2015).
Effective date	October 10, 1995.
Amended and restated	January 1, 2013.
Eligible employees	Employees of Syracuse China Company, excluding collectively bargained employees, leased employees, temporary employees and employees of Drummond Glass Company, Libbey Glass Inc., Traex or World Tableware Inc. and employees hired after December 31, 2005.
Participation date	January 1 or July 1 coincident with or next following the first anniversary of the person's Employment Date.

Definitions	
Service	■ Years and months of service in eligible class from Employment Date to Separation from Service Date. ■ Includes service under the 1997 Plan through December 31, 1997. ■ Disabled Employees continue to earn service.
Pensionable pay	Compensation paid by an Employer as defined in the Plan: base salary including overtime pay, production schedule premium payments, incidental payments made in addition to base salary attributed to performance, shift differential, goal sharing, bonus and other incentive payments in the year paid plus 401(k) and Section 125 deferrals.
Social Security benefit	The amount of earning subject to the FICA Social Security tax in effect at beginning of the Plan Year.
Normal retirement date (NRD)	First of month on or after the attainment of age 65.
Opening account balance	For a participant on December 31, 1997, who is an active employee on January 1, 1998: single sum amount equal to 100% of the current value of the Accrued Benefit under the 1997 Syracuse Plan at December 31, 1997, based on NRD (or if age 65 or older, December 31, 1997) and the actuarial assumptions in Appendix A of the plan document, including 7.00% interest and the 1983 GAM (unisex) mortality table (post-65 only).

SCHEDULE SB ATTACHMENTS

Annual cash balance contribution

For each Plan Year after January 1, 1998, the Annual Cash Balance contribution equals Compensation times Contribution Percentage from schedule:

Contribution Percentage Schedule		
Sum of age and years of Services	**Contribution percentage of compensation under Social Security Wage Base**	**Contribution percentage of compensation at or above Social Security Wage Base**
0 but less than 30	1.5%	3.0%
30 but less than 34	1.7	3.4
34 but less than 38	1.9	3.8
38 but less than 42	2.1	4.2
42 but less than 46	2.3	4.6
46 but less than 50	2.7	5.4
50 but less than 60	3.2	6.4
60 but less than 70	4.0	8.0
70 but less than 80	5.5	11.0
80 but less than 90	7.0	12.7
90 and over	9.0	14.7

Interest credits

Rates: 30-year Treasury Securities rate in effect as of the month of October (September average) of preceding Plan Year.

- Minimum: 5%
- Maximum 10%

Applied on last day of Plan Year to Cash Balance Account amount as of first date of each Plan Year.

SCHEDULE SB ATTACHMENTS

Immediate cash balance account annuity	Annual amount of retirement income calculated as: (a) Cash Balance Account divided by (b) Immediate annuity factor for one dollar of annual benefit under a life annuity option, based on actuarial assumptions in Appendix A of the Plan and age at pension starting date.
Deferred cash balance account annuity	Projected annual amount that would be payable on NRD determined by: (a) Current Cash Balance Account projected at interest rate equal to Interest Credit compounded annually for number of years and months to NRD divided by (b) Immediate annuity factor for one dollar of annual benefit under a life annuity option, based on actuarial assumptions in Appendix A of the Plan at Normal Retirement Age.
Pension benefit	Immediate Cash Balance Account Annuity

Eligibility for Benefits

Normal retirement	Retirement on NRD.
Early retirement	Retirement before NRD and on or after both attaining age 55 and completing five years of Service.
Postponed retirement	Retirement after NRD.
Deferred vested retirement	Termination for reasons other than death, disability or retirement after completing five years of Service.
Preretirement death	Death while vested and prior to receive a retirement benefit. Benefit may be paid to spouse or other beneficiary.

Benefits Paid Upon the Following Events

Normal retirement	Pension benefit as of NRD.
Early retirement	Pension benefit as of early retirement date.
Postponed retirement	Pension benefit as of postponed retirement date.
Deferred vested termination	Pension benefit as of early retirement date or later.
Preretirement death	Pension benefit as of death date payable as immediate annuity or lump sum (a surviving spouse may choose to defer payment). Benefit to spouse shall not be less than actuarial equivalent of 50% joint and survivor annuity amount.

SCHEDULE SB ATTACHMENTS

Payment forms	Single life, 50%, 75% or 100% Joint and Survivor, Lump Sum, Level Income
	Payment forms are calculated using conversion factors generally assuming the 1983 Group Annuity Mortality Unisex table for both the participant and the beneficiary and 7.00% interest.
	Spousal consent is required if a married participant chooses any option other than joint and survivor annuity.
Maximum on benefits and pay	All benefits and pay for any calendar year may not exceed the maximum limitations for that year as defined in the Internal Revenue Code. The plan provides for increasing the dollar limits automatically as such changes become effective.

Plan Provisions Effective After January 1, 2018

No future plan provisions were recognized in determining minimum and maximum contributions.

Changes in Plan Provisions Since Prior Year

None.

Significant Events

None.

SCHEDULE SB ATTACHMENTS

Plan Provisions

Name of prior plan	Syracuse China Company Union Pension Plan (merged into the Libbey Salary Plan effective December 31, 2015).
Effective date	October 10, 1995.
Amended and restated	January 1, 2013.
Eligible employees	All collectively bargained employees in units covered by the plan who are full-time or part-time and have completed 1,000 hours.
Participation date	Date of becoming a covered employee.

Definitions

Service

- Full-time employees: Years and months of service as a covered employee.
- Part-time employees: One year of service if 1,000 hours are worked.

Normal retirement date (NRD): Dates participant attains age 65

Pension benefit: Monthly benefit rate times the number of years of service up to the maximum shown below:

Effective Date	Rate	Service Maximum
10/10/1995	$15.00	30
4/1/1995	16.00	32
4/1/1997	17.00	32
4/1/1998	18.00	32
4/1/1999	19.00	35
4/1/2000	20.00	35
4/1/2001	21.00	35
4/1/2002	22.00	--
4/1/2003	23.00	--
4/1/2004	24.00	--
4/1/2005	25.00	--

SCHEDULE SB ATTACHMENTS

Eligibility for Benefits	
Normal retirement	Retirement on NRD.
Early retirement	Retirement before NRD and on or after both attaining age 60 and completing 15 years of service.
Postponed retirement	Retirement after NRD.
Deferred vested retirement	Termination for reasons other than death, disability or retirement after completing five years of service.
Preretirement death	Death while eligible for normal, early, postponed or deferred vested retirement benefits, with a surviving spouse.

Monthly Benefits Paid Upon the Following Events	
Normal retirement	Pension benefit as of NRD.
Early retirement	Pension benefit as of early retirement date, reduced by 0.5% for each month that benefit commencement precedes age 65.
Postponed retirement	Pension benefit determined as of actual retirement date.
Deferred vested termination	Pension benefit as deferred retirement date.
Preretirement death	50% of the pension benefit as of the date of death, reduced for the 50% joint and survivor election and reduced for payment as early as the participant's early retirement date.
Payment forms	Preretirement spouse benefits are payable only as described above. Monthly pension benefits are paid as described above, if the participant has no spouse as of the date payments begin, or if the participant so elects. Otherwise, benefits are paid in the form of the 50% joint and survivor annuity option or, if the participant elects and the spouse consents, another actuarially equivalent optional form offered by the plan. Other optional forms are available are: Single Life, 75% or 100% Joint and Survivor, 10 Year Certain and Continuous. Payment forms are calculated using conversion factors assuming the 1971 TPFC Forecast Mortality Table using a 5-year setback for the beneficiary and a 1-year setback for the participant, and assuming 8.00% interest.

SCHEDULE SB ATTACHMENTS

Plan Provisions Effective After January 1, 2018

No future plan provisions were recognized in determining minimum and maximum contributions or pension cost.

Changes in Plan Provisions Since Prior Year

None.

Significant Events

None.

Plan Name:	Libbey Inc. Salaried Cash Balance Pension Plan
EIN / PN:	34-1559357/003
Plan Sponsor:	Libbey Inc.
Valuation Date	January 1, 2018

Plan Name	**Libbey Inc. Hourly Retirement Plan**
Plan Sponsor EIN	**34-1559357**
ERISA Plan #	**004**
Plan Year Ending	**12/31/2018**

The required attachment marked with an "X" in the Attachment column is included within the "Signed Schedule MB or Schedule SB" attachment to Schedule SB location which consists of the entire Schedule SB and its attachments.

Form / Schedule	Line#	Description	Attachment Title (if different from Description)	Attach-ment
5500 Sch. SB	**None**	Statement by Enrolled Actuary		**x**
5500 Sch. SB	**Line 27**	Actuarial Information Based on Pre-PPA Funding Rules		
5500 Sch. SB	**Line E**	Information for Each Individual Employer		
5500 Sch. SB	**Line 4**	Additional Information for Plans in At-Risk Status		
5500 Sch. SB	**Line 7**	Explanation of Discrepancy in Prior Year Funding Standard Carryover Balance or Prefunding		
5500 Sch. SB	**Line 8**	Late Election to Apply Balances to Quarterly Installments		
5500 Sch. SB	**Line 9**	Explanation of Credit Balance Discrepancy		
5500 Sch. SB	**Line 18**	Contributions Made to the Plan for the Plan Year		
5500 Sch. SB	**Line 19**	Discounted Employer Contributions		
5500 Sch. SB	**Line 20c**	Liquidity Requirement Certification		
5500 Sch. SB	**Line 22**	Description of Weighted Average Retirement Age		x
5500 Sch. SB	**Line 23**	Information on Use of Multiple Mortality Tables		
5500 Sch. SB	**Line 23**	Information on Use of Substitute Mortality Tables		
5500 Sch. SB	**Part V**	Statement of Actuarial Assumptions/Methods		x
5500 Sch. SB	**Part V**	Summary of Plan Provisions		x
5500 Sch. SB	**Line 24**	Change in Actuarial Assumptions		
5500 Sch. SB	**Line 25**	Change in Method		
5500 Sch. SB	**Line 26**	Schedule of Active Participant Data		x
5500 Sch. SB	**Line 27**	Balances Subject to Binding Agreement with PBGC		
5500 Sch. SB	**Line 27**	Alternative 17-Year Funding Schedule of Airlines		
5500 Sch. SB	**Line 32**	Schedule of Amortization Bases		
5500 Sch. SB		Other Attachment [Enter Description]		

Plan Name	**Libbey Inc. Hourly Retirement Plan**
Plan Sponsor EIN	**34-1559357**
ERISA Plan #	**004**
Plan Year Ending	**12/31/2018**

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5500 Sch. SB	**Part V**	Summary of Plan Provisions		x
5500 Sch. SB	**Line 24**	Change in Actuarial Assumptions		
5500 Sch. SB	**Line 25**	Change in Method		
5500 Sch. SB	**Line 26**	Schedule of Active Participant Data		x
5500 Sch. SB	**Line 27**	Balances Subject to Binding Agreement with PBGC		
5500 Sch. SB	**Line 27**	Alternative 17-Year Funding Schedule of Airlines		
5500 Sch. SB	**Line 32**	Schedule of Amortization Bases		
5500 Sch. SB		Other Attachment [Enter Description]		

Plan Name	**Libbey Inc. Hourly Retirement Plan**
Plan Sponsor EIN	**34-1559357**
ERISA Plan #	**004**
Plan Year Ending	**12/31/2018**

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