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

2016

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

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
ALERIS CASH BALANCE PLAN

1b Three-digit plan number (PN) ▶ 008

1c Effective date of plan 01/01/1962

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)

ALERIS ROLLED PRODUCTS, INC.

25825 SCIENCE PARK DR STE 400
BEACHWOOD, OH 44122-7392

2b Employer Identification Number (EIN) 27-1539745

2c Plan Sponsor's telephone number 216-910-3400

2d Business code (see instructions) 331400

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.	10/13/2017	MELISSA OLMSTEAD
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			
	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

Preparer's name (including firm name, if applicable) and address (include room or suite number)

Preparer's telephone number

3a	Plan administrator's name and address [X] Same as Plan Sponsor	**3b**	Administrator's EIN
		3c	Administrator's telephone number
4	If the name and/or EIN of the plan sponsor has changed since the last return/report filed for this plan, enter the name, EIN and the plan number from the last return/report:	**4b**	EIN
a	Sponsor's name	**4c**	PN

5	Total number of participants at the beginning of the plan year	**5**	718
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)**	116
a(2)	Total number of active participants at the end of the plan year	**6a(2)**	109
b	Retired or separated participants receiving benefits	**6b**	288
c	Other retired or separated participants entitled to future benefits	**6c**	222
d	Subtotal. Add lines **6a(2)**, **6b**, and **6c**.	**6d**	619
e	Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.	**6e**	72
f	Total. Add lines **6d** and **6e**.	**6f**	691
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 that terminated employment during the plan year with accrued benefits that were less than 100% vested	**6h**	0
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:

1C 1I 3H

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

b General Schedules

- **(1)** [X] **H** (Financial Information)
- **(2)** [ ] **I** (Financial Information – Small Plan)
- **(3)** [ ] 0 **A** (Insurance Information)
- **(4)** [X] **C** (Service Provider Information)
- **(5)** [X] **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 2016 Form M-1 annual report. If the plan was not required to file the 2016 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

2016

This Form is Open to Public Inspection

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

▶ **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
ALERIS CASH BALANCE PLAN

B Three-digit plan number (PN) ▶ 008

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

D Employer Identification Number (EIN)
27-1539745

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 2016

2 Assets:

a Market value	**2a**	30362418
b Actuarial value	**2b**	31936567

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	356	22109038	22109038
b For terminated vested participants	251	5088565	5088565
c For active participants	116	5694027	5694027
d Total	723	32891630	32891630

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**	5.83 %
6 Target normal cost	**6**	367553

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

09/22/2017
Date

NICHOLAS FRIES
Type or print name of actuary

17-07926
Most recent enrollment number

MERCER
Firm name

216-830-8031
Telephone number (including area code)

200 PUBLIC SQUARE, SUITE 3760
CLEVELAND, OH 44114
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 0.25%	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)		1157
	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 6.05 %		70
	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		1227
	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	97.09%
15	Adjusted funding target attainment percentage	15	97.09%
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	94.42%
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
04/08/2016	427000	0			
07/14/2016	108000	0			
10/11/2016	267000	0			
01/18/2017	267000	0			
09/13/2017	170000	0			
			Totals ► 18(b)	1239000	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	1186805

20 Quarterly contributions and liquidity shortfalls:

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

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

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

Liquidity shortfall as of end of quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th
0	0	0	0

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

21 Discount rate:

a Segment rates:

1st segment:	2nd segment:	3rd segment:	
4.43%	5.91%	6.65%	☐ N/A, full yield curve used

b Applicable month (enter code)	**21b**	0
22 Weighted average retirement age	**22**	61

23 Mortality table(s) (see instructions) ☐ 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**	367553
b Excess assets, if applicable, but not greater than line 31a	**31b**	0

32 Amortization installments:

	Outstanding Balance	Installment
a Net shortfall amortization installment	955063	818397
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**	0
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	**34**	1185950

	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**	1185950
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	1186805

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

a Total (excess, if any, of line 37 over line 36)	**38a**	855
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	**38b**	
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

42 Amount of acceleration adjustment	**42**	
43 Excess installment acceleration amount to be carried over to future plan years	**43**	

SCHEDULE C (Form 5500)	Service Provider Information	OMB No. 1210-0110
Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ **File as an attachment to Form 5500.**	**2016** **This Form is Open to Public Inspection.**

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan
ALERIS CASH BALANCE PLAN

B Three-digit plan number (PN) ▶ 008

C Plan sponsor's name as shown on line 2a of Form 5500
ALERIS ROLLED PRODUCTS, INC.

D Employer Identification Number (EIN)
27-1539745

Part I Service Provider Information (see instructions)

You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

a Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions).. . . . . [X] Yes [ ] No

b If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

ASTON ASSET MANAGEMENT
120 NORTH LASALLE STREET
25TH FLOOR
CHICAGO, IL 60602

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

FRANKLIN TEMPLETON INVESTMENTS
P O BOX 33030
ST PETERSBURG, FL 33733-8030

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

VANGUARD

23-2376849

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

WILLIAM BLAIR FUNDS
222 WEST ADAMS STREET
12TH FLOOR
CHICAGO, IL 60606

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

SANDERSON ASSET MANAGEMENT

20-0348128

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

MERCER

13-2834414

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
50 16	NONE	72483	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

AON HEWITT

36-2235791

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
50 13	NONE	56971	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

BDO USA, LLP

1422 EUCLID AVENUE
SUITE 1500
CLEVELAND, OH 44115

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
10 11 50	NONE	11779	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

WELLS FARGO

94-2948313

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
50 16 64 25 27 63 14 10	TRUSTEE	11149	Yes [X] No [ ]	Yes [X] No [ ]	0	Yes [ ] No [X]

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes [ ] No [ ]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes [ ] No [ ]	Yes [ ] No [ ]		Yes [ ] No [ ]

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)

(complete as many entries as needed)

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

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

2016

This Form is Open to Public Inspection.

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan
ALERIS CASH BALANCE PLAN

B Three-digit plan number (PN) ▶ 008

C Plan or DFE sponsor's name as shown on line 2a of Form 5500
ALERIS ROLLED PRODUCTS, INC.

D Employer Identification Number (EIN)
27-1539745

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: ABS GLOBAL EQUITY PORTFOLIO

b Name of sponsor of entity listed in (a): ABS ALPHA, LTD

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)
98-0544028-001	E	4673770

a Name of MTIA, CCT, PSA, or 103-12 IE: SANDERSON INTL VAL EQUITY FUND

b Name of sponsor of entity listed in (a): SANDERSON ASSET MANAGEMENT LIMITED

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)
20-0348128-001	E	3566071

a Name of MTIA, CCT, PSA, or 103-12 IE: JPM STRAT PROP IRT DECENT MIR HLD

b Name of sponsor of entity listed in (a): JPMORGAN CHASE BANK, N.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)
13-6038770-001	C	3413869

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

a Plan name

b Name of plan sponsor	**c** EIN-PN

SCHEDULE H (Form 5500)

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

2016

This Form is Open to Public Inspection

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan
ALERIS CASH BALANCE PLAN

B Three-digit plan number (PN) ▶ 008

C Plan sponsor's name as shown on line 2a of Form 5500
ALERIS ROLLED PRODUCTS, INC.

D Employer Identification Number (EIN)
27-1539745

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 reportable 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)	631000	437000
(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)	352408	679420
(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)	9519800	10664779
(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)	4608499	3413869
(10) Value of interest in pooled separate accounts	1c(10)		
(11) Value of interest in master trust investment accounts	1c(11)		
(12) Value of interest in 103-12 investment entities	1c(12)	8541700	8239841
(13) Value of interest in registered investment companies (e.g., mutual funds)	1c(13)	6719688	6549604
(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	30373095	29984513
	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	30373095	29984513

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)	1239000	
	(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)		1239000
b	**Earnings on investments:**			
	(1) Interest:			
	(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)	835	
	(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)		835
	(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)	102399	
	(D) Total dividends. Add lines **2b(2)(A)**, **(B)**, and **(C)**	2b(2)(D)		102399
	(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)	1331228	
	(C) Total unrealized appreciation of assets. Add lines **2b(5)(A)** and **(B)**	2b(5)(C)		1331228

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		263874
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		
(9) Net investment gain (loss) from 103-12 investment entities	2b(9)		8469
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		453623
c Other income	2c		
d Total income. Add all **income** amounts in column (b) and enter total	2d		3399428
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	3276910	
(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)		3276910
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)	86103	
(2) Contract administrator fees	2i(2)	323952	
(3) Investment advisory and management fees	2i(3)	99641	
(4) Other	2i(4)	1404	
(5) Total administrative expenses. Add lines **2i(1)** through **(4)**	2i(5)		511100
j Total expenses. Add all **expense** amounts in column (b) and enter total	2j		3788010
Net Income and Reconciliation			
k Net income (loss). Subtract line **2j** from line **2d**	2k		-388582
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: BDO USA, LLP **(2)** EIN: 13-5381590

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		X	
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			
o	Defined Benefit Plan or Money Purchase Pension Plan Only: Were any distributions made during the plan year to an employee who attained age 62 and had not separated from service?	4o			

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

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 3962795 . (See instructions.)

Part V Trust Information

6a Name of trust
WELLS FARGO

6b Trust's EIN
942948313

6c Name of trustee or custodian

6d Trustee's or custodian's telephone number

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

2016

This Form is Open to Public Inspection.

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan
ALERIS CASH BALANCE PLAN

B Three-digit plan number (PN) ▶ 008

C Plan sponsor's name as shown on line 2a of Form 5500
ALERIS ROLLED PRODUCTS, INC.

D Employer Identification Number (EIN)
27-1539745

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): 41-2657133

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** 14

Part II Funding Information (If the plan is not subject to the minimum funding requirements of section of 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: _____% Investment-Grade Debt: _____% High-Yield Debt: _____% Real Estate: _____% Other: _____%

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):

Part VII IRS Compliance Questions

20a Is the plan a 401(k) plan? If "No," skip b	☐ Yes ☐ No
20b How did the plan satisfy the nondiscrimination requirements for employee deferrals under section 401(k)(3) for the plan year? Check all that apply:	☐ Design-based safe harbor ☐ "Prior year" ADP test ☐ "Current year" ADP test ☐ N/A
21a What testing method was used to satisfy the coverage requirements under section 410(b) for the plan year? Check all that apply:	☐ Ratio percentage test ☐ Average benefit test ☐ N/A
21b Did the plan satisfy the coverage and nondiscrimination requirements of sections 410(b) and 401(a)(4) for the plan year by combining this plan with any other plan under the permissive aggregation rules?	☐ Yes ☐ No

22a If the plan is a master and prototype plan (M&P) or volume submitter plan that received a favorable IRS opinion letter or advisory letter, enter the date of the letter _____/_____/_____ and the serial number _____.

22b If the plan is an individually-designed plan that received a favorable determination letter from the IRS, enter the date of the most recent determination letter _____/_____/_____.

Aleris Cash Balance Plan

Financial Statements
And Supplemental Schedules
Years Ended December 31, 2016 and 2015

The report accompanying these financial statements was issued by
BDO USA, LLP, a Delaware limited liability partnership and the U.S. member of
BDO International Limited, a UK company limited by guarantee.

Aleris Cash Balance Plan

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Independent Auditor's Report

To the Benefits Committee
Aleris Cash Balance Plan
Beachwood, Ohio

Report on the Financial Statements

We were engaged to audit the accompanying financial statements of the Aleris Cash Balance Plan (the Plan), which comprise the statements of net assets available for benefits as of December 31, 2016 and 2015, 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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on conducting the audits in accordance with auditing standards generally accepted in the United States of America. Because of the matter 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 Wells Fargo Bank, N.A., 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 a certification from the trustee as of and for the years ended December 31, 2016 and 2015, that the information provided to the plan administrator by the trustee is complete and accurate.

BDO USA, LLP, a Delaware limited liability partnership, is the U.S. member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms.

BDO is the brand name for the BDO network and for each of the BDO Member Firms.

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.

Other Matter – Supplemental Schedules

The supplemental schedules of Assets (Held at End of Year) and Reportable Transactions as of and for the year ended December 31, 2016 are required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 and are presented for the purpose of additional analysis and are not a required part of the financial statements. Because of the significance of the matter described in the *Basis for Disclaimer of Opinion* paragraph, we do not express an opinion on the supplemental schedules referred to above.

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

The form and content of the information included in the 2016 financial statements and supplemental schedules, other than that derived from the information certified by the trustee, have 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 the Employee Retirement Income Security Act of 1974.

BDO USA, LLP

Cleveland, Ohio
October 11, 2017

Aleris Cash Balance Plan

Statements of Net Assets Available for Benefits

	December 31,	
	2016	**2015**
Assets		
Investments, at fair value as determined by quoted market prices:		
Interest-bearing cash	$ 679,420	$ 352,408
Mutual funds	6,549,604	6,719,688
Investments, at estimated fair value:		
Commingled funds	11,653,710	13,150,199
Limited partnership interests	10,664,779	9,519,800
Total investments	29,547,513	29,742,095
Employer contributions receivable	437,000	631,000
Net assets available for benefits	$ 29,984,513	$ 30,373,095

See accompanying notes to financial statements.

Aleris Cash Balance Plan

Statements of Changes in Net Assets Available for Benefits

	For the Year Ended December 31,	
	2016	**2015**
Investment income:		
Net appreciation in fair value of investments	$ 2,057,194	$ 75,990
Interest, dividends, and other	103,234	103,961
	2,160,428	179,951
Employer contributions	1,239,000	1,783,000
Deductions:		
Benefits paid to participants	3,276,910	3,271,407
Administrative expenses	511,100	470,066
	3,788,010	3,741,473
Net decrease	(388,582)	(1,778,522)
Net assets available for benefits:		
Beginning of year	30,373,095	32,151,617
End of year	$ 29,984,513	$ 30,373,095

See accompanying notes to financial statements.

Aleris Cash Balance Plan

Notes to Financial Statements

December 31, 2016 and 2015

1. Description of the Plan

The following description of the Aleris Cash Balance Plan (the "Plan") is provided for general information only. Complete information regarding the Plan's provisions may be found in the Plan document, which is available to all participants upon request.

General

The Plan is a noncontributory cash balance defined benefit plan covering all eligible employees of Aleris Rolled Products, Inc. (the "Plan Sponsor") and other subsidiaries of Aleris International, Inc. (the "Company"), and provides for retirement income, disability, and preretirement death benefits. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA").

Information about the Plan, the vesting and benefit provisions and the Pension Benefit Guaranty Corporation's ("PBGC") benefit guarantee is contained in the Plan's *Summary Plan Description*. Copies of the *Summary Plan Description* are available from the Company's employee benefits department.

The Plan is a cash balance account plan whereby a participant's accrued benefit is maintained in a notional cash balance account. A participant's notional cash balance account consists of the sum of the benefit credits and the interest credits entitled under the Plan. Effective January 1, 2007, the Plan was amended such that participants no longer earn additional benefit credits, any increase in their accrued benefits (excluding interest credits), or additional credited service, as defined in the Plan. The interest rate to be used for interest credits is the lesser of (i) the average auction yields on a three-year Treasury bill for each of the months during the 12-month period ending on November 1 of each preceding plan year, or (ii) the 30-year treasury rate on November 1 preceding the beginning of the plan year. The interest crediting rate cannot be less than the interest rate determined by compounding the annual interest crediting rates provided under the Plan for the six-year period beginning five years before the current plan year and the minimum interest crediting rate for such six-year compounding period shall be 22.45%.

Plan Administration

Overall responsibility for administering the Plan rests with the Company's Benefits Committee, which is appointed by the Board of Directors of the Company. The Company's Benefits Committee has appointed Wells Fargo Bank, N.A. as the trustee of the Plan (the "Trustee"). Wells Fargo Bank, N.A. is responsible for management and control of the Plan's assets.

Eligibility

The Plan provides benefits to eligible employees of the Company. Employees that are covered under a collective bargaining agreement are not eligible. Effective December 9, 2004, the Plan was amended to preclude any employee hired by the Company on or after that date from participating in the Plan.

Funding Policy

The Company has agreed to voluntarily contribute such amounts as are necessary to provide assets sufficient to meet the benefits to be paid to plan participants. The Company's intention is to make contributions in amounts sufficient

to fund the Plan's normal costs on a current basis and any increases in the past service liability due to subsequent amendments to the Plan. The Plan has met the minimum funding requirements of ERISA for 2016 and 2015.

Benefit and Vesting Provisions

The Plan generally provides for normal retirement at age 65. The Plan provides for payments of retirement, disability and death benefits to participants or their beneficiaries under various payment options, including a monthly retirement benefit, straight-life annuity and single-sum payment. Participants are 100% vested after three years of service.

Plan Termination

The Company reserves the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. Upon termination, the net assets of the Plan will be allocated for payment to the participants in an order of priority as prescribed by ERISA and its related regulations and the Plan document.

Whether all participants receive their benefits should the Plan terminate at some future time will be dependent on the sufficiency, at that time, of the Plan's net assets to provide for accumulated plan benefits and may also depend on the financial condition of the Company and the level of benefits guaranteed by the PBGC as well as the priority of those benefits. Some benefits may be fully or partially provided for by the then-existing net assets of the Plan and the PBGC guarantee, while other benefits may not be provided for at all.

2. Summary of Significant Accounting Policies

Basis of Accounting

The accompanying financial statements of the Plan have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and the accompanying notes and supplemental schedules. Actual results could differ from those estimates.

Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks, such as interest rate, market volatility 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.

Plan contributions are made and the actuarial present value of accumulated plan benefits are 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 estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term could be material to the financial statements.

Investment Valuation and Income Recognition

The Plan's investments are stated at fair value. 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. See Note 4 for further discussion and disclosures related to fair value measurements.

In conformity with Accounting Standards Codification ("ASC") 820, *Fair Value Measurement*, assets and liabilities measured at fair value are categorized into the following fair value hierarchy:

Level 1 – Fair value is based on unadjusted quoted prices for identical assets or liabilities in an active market that the Plan has the ability to access at the measurement date.

Level 2 – Fair value is based on quoted prices in markets that are not active, quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the asset or liability.

Level 3 – Fair value is based on prices or valuation techniques that require inputs that are both significant to the fair value measurements and unobservable. These inputs reflect management's judgment about the assumptions that a market participant would use in pricing the investment and are based on the best available information, some of which may be internally developed.

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 includes the Plan's gains and losses on investments bought and sold as well as held during the year.

Benefit Payments

Benefits are recorded when paid.

Administrative Expenses

Administrative expenses are paid by the Plan.

Actuarial Present Value of Accumulated Plan Benefits

Accumulated plan benefits (see Note 3) represent the actuarial present value of estimated future periodic payments, including lump-sum distributions that are attributable under the Plan's provisions to services rendered by employees through the valuation date. Accumulated plan benefits include benefits expected to be paid to (a) retired or terminated employees or their beneficiaries (b) beneficiaries of deceased employees and (c) present employees or their beneficiaries. Normal retirement benefits for participants who retire or otherwise terminate employment in plan years commencing after January 1, 1998, are based on the participants' notional account balances on the normal retirement date converted to a benefit using the RP-2014 Mortality Table and an applicable interest rate. The Plan also includes provisions for the payment of later retirement benefits, early retirement benefits, disability benefits, and deferred vested benefits to participants. The accumulated plan benefits for active employees are based on their compensation for services rendered and interest credits accumulated prior to the valuation date. Benefits payable under all circumstances (retirement, death, disability, and termination of employment) are included only to the extent they are deemed attributable to employee services rendered through the valuation date.

Evaluation of Subsequent Events

Plan management has evaluated subsequent events through October 11, 2017, which is the date the financial statements were available to be issued.

Effective January 1, 2017, the interest crediting rate was adjusted to be the lesser of (a) the average of the auction yields on a three-year treasury rate or (b) the annual rate of interest on a 30-year treasury security. The interest crediting rate cannot be less than the interest rate determined by compounding the annual interest crediting rates provided under the Plan for the six-year period beginning five years before the current plan year and the minimum interest crediting rate for such six-year compounding period shall be 22.45%. In October 2017, the Internal Revenue Service updated the mortality tables to be used for both ERISA funding and lump sum benefits beginning in the 2018 calendar year. In addition, it also updated the static mortality tables for plan years beginning during 2017 with respect to valuation dates occurring during 2018. These changes could potentially impact lump sum benefits, funding costs and balance sheet obligations, except in situations where the projected lump sum mortality rates were already considered. Plan management is currently evaluating the impact to the Plan.

There were no other subsequent events that have occurred through that date that have not already been reflected in the financial statements and /or disclosed in the notes.

3. Actuarial Present Value of Accumulated Plan Benefits

Mercer (U.S.) Inc., the Plan's actuary, estimated the actuarial present value of accumulated plan benefits, which is the amount that resulted from applying actuarial assumptions to adjust the accumulated plan benefits earned by the participants to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements for death, disability, withdrawal or retirement) between the valuation date and the expected date of payment.

The actuarial present value of accumulated plan benefits is as follows:

	January 1,	
	2016	**2015**
Actuarial present value of accumulated plan benefits:		
Vested benefits:		
Participants currently receiving benefits	$ 21,235,121	$ 21,566,170
Other participants	9,801,673	10,301,226
Total vested benefits	31,036,794	31,867,396
Total actuarial present value of accumulated plan benefits	$ 31,036,794	$ 31,867,396

The changes in accumulated plan benefits as of January 1, 2016, are as follows:

Actuarial present value of accumulated plan benefits at beginning of year	$ 31,867,396
(Decrease) increase during the year attributed to:	
Benefits accumulated and gains/losses	(65,994)
Increase for interest due to the decrease in the discount period	2,407,612
Benefits paid	(3,271,407)
Change in actuarial assumptions	99,187
Net decrease	(830,602)
Actuarial present value of accumulated plan benefits at end of year	$ 31,036,794

Significant assumptions underlying the actuarial valuation include:

Interest crediting rate	3.50% (1.55% for the year ended January 1, 2015)
Assumed rate of return on investments	7.75%
Mortality basis	Adjusted RP-2014 which back out the post-2006 mortality improvements, white collar, separate annuitant and non-annuitant, sex distinct base tables. Post-2006 mortality improvements are projected generationally using the MP-2015 projection scale (The RP-2014 tables using MP-2014 projection scale for the year ended December 31, 2014)
Normal retirement	Age 65

The actuarial assumptions are based on the presumption that the Plan will continue. Were the Plan to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits. The actuary estimated the accumulated plan benefits as of January 1, 2016.

4. Fair Value Measurements

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. The fair value hierarchy distinguishes between (1) market participant assumptions developed based on market data obtained from independent sources (observable inputs) and (2) an entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs). The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy in ASC 820 are described in Note 2.

The level in the fair value hierarchy within which the fair value measurement is classified is determined based on the lowest level input that is significant to the fair value measure in its entirety. Following is a description of the valuation techniques and inputs used for each major class of assets measured at fair value.

Interest-bearing cash: Valued at carrying value (which approximates fair value due to the short-term nature of the asset).

Mutual funds: Valued at quoted prices from an active market which represents the net asset value ("NAV") of shares held by the Plan at year-end.

Commingled funds: Valued at the NAV of units held by the Plan, which was determined by dividing the fair value of the fund's net assets by its units outstanding at the valuation date.

Limited partnership interests: Valued at estimated NAV at the valuation date.

While the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following tables set forth by level, within the fair value hierarchy, the Plan's assets carried at fair value as of December 31, 2016 and 2015:

	Assets at Fair Value as of December 31, 2016			
	Total	**Level 1**	**Level 2**	**Level 3**
Interest-bearing cash	$ 679,420	$ 679,420	$ -	$ -
Mutual funds:				-
Small/Mid U.S. equity	901,301	901,301	-	-
Large U.S. equity	3,835,674	3,835,674	-	-
International equity	1,812,629	1,812,629	-	-
Total assets in the fair value hierarchy	7,229,024	7,229,024	-	-
Investments measured at NAV (a)	22,318,489			
Total assets	$ 29,547,513	$ 7,229,024	$ -	$ -

	Assets at Fair Value as of December 31, 2015			
	Total	**Level 1**	**Level 2**	**Level 3**
Interest-bearing cash	$ 352,408	$ 352,408	$ -	$ -
Mutual funds:				-
Small/Mid U.S. equity	1,345,100	1,345,100	-	-
Large U.S. equity	3,326,717	3,326,717	-	-
International equity	2,047,871	2,047,871	-	-
Total assets in the fair value hierarchy	7,072,096	7,072,096	-	-
Investments measured at NAV (a)	22,669,999			
Total assets	$ 29,742,095	$ 7,072,096	$ -	$ -

(a) In accordance with ASC 820-10, certain investments that were measured at NAV (or its equivalent) have not been classified in the fair value hierarchy. The fair value amounts presented in the table are intended to permit reconciliation of the fair value hierarchy to the line items presented in the Statements of Net Assets Available for Benefits.

The following table summarizes investments measured at fair value based on NAV per share as of December 31, 2016 and 2015:

	As of December 31,	
	2016	**2015**
Commingled funds:		
Hedged equity (a)	$ 4,673,770	$ 4,812,207
Core real eastate (b)	3,413,869	4,608,499
International large cap equity (c)	3,566,071	3,729,493
Limited partnership interests:		
Core fixed income (d)	6,951,284	6,664,666
Small cap value equity (e)	3,713,495	2,855,134
Total assets measured at fair value based on NAV	$ 22,318,489	$ 22,669,999

The Plan used the practical expedient to measure the fair value of the commingled funds and limited partnership interests at December 31, 2016 and 2015 within the scope of Accounting Standards Update 2009-12, *Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)* based on the investment's NAV. A description of each of the significant investment strategies is as follows:

a) **Hedged equity:** Hedged equity fund is comprised primarily of shares or units in other investment companies or trusts. The fund invests the assets of its portfolios in other private investment funds. The investment objective of the fund is to generate absolute returns while maintaining a moderate level of risk.

Its portfolio assets are allocated to the other private investment funds targeting absolute returns throughout the global financial markets with an emphasis on developed markets. In addition to its investments in other private investment funds, the fund may also make short-term investments for liquidity or defensive purposes, including but not limited to, interest-earning money market accounts, government obligations, commercial paper and short-term certificates of deposit. The fund may also maintain positions in a variety of derivative and non-derivative financial instruments in order to manage the various types of risks that are associated with the financial instruments and markets in which it invests. The fund's investments can only be redeemed on the first business day of each calendar quarter or each calendar month, but only after such redemption request has been made at least 45 days prior to the last business day of each quarter. The Plan has the ability to redeem the investment at the NAV (or its equivalent) in the near term.

b) **Core real estate:** Core real estate fund is composed primarily of real estate investments owned through a commingled pension trust fund. The investment objective of the fund is to provide a high, stable income stream with the potential for moderate capital appreciation over the long term. The core real estate fund invests in high-quality stabilized office, retail, residential and industrial assets in primary markets throughout the United States. Management of the core real estate fund has the ability to rebalance and refine the composition of the overall portfolio and remove assets of lesser quality and/or growth prospects, and where appropriate, trade up for asset quality and geographic location. As a result of how the fund is managed and priced, an extended notice period of six months is required for redemption requests. The Plan has the ability to redeem the investment at the NAV (or its equivalent) in the near term.

c) **International large cap equity:** International large cap equity fund invests in equity securities. The investment objective of the fund is to achieve long-term growth principally by investing in a diversified portfolio of equity securities of companies ordinarily located in any country other than the United States and Canada. Redemption requests must be made at least six business days before the end of the month. The Plan has the ability to redeem the investment at the NAV (or its equivalent) on the measurement date.

d) **Core fixed income:** Core fixed income fund invests primarily in fixed income securities. The investment objective is to seek total return consistent with the preservation of capital by investing in U.S. dollar-denominated fixed income securities, particularly U.S. government, agency, corporate and mortgage-backed issues. Investments may also include highly liquid AAA-rated mortgage paper, investment grade corporate and Yankee securities. The Plan has the ability to redeem the investment at the NAV (or its equivalent) on the measurement date.

e) **Small cap value equity:** Limited partnership interests invest primarily in equity securities of domestic and international small capitalization companies. Redemptions may be made on the last day of any month, subject to approval and certain other limitations. The Plan has the ability to redeem the investment at the NAV (or its equivalent) at the reporting date.

There were no unfunded commitments at December 31, 2016 and 2015 for any of the commingled funds or limited partnership interests.

The Company's Benefits Committee is responsible for determining the Plan's valuation policies and analyzing information provided by the investment Trustee and funds' general managers or partners that is used to determine the fair value of the Plan's investments. The Company's Benefits Committee is comprised of various members of the Company's management (including the Company's Chief Financial Officer, General Counsel and Executive Vice President, and Chief Human Resources Officer) and reports to the Company's Board of Directors. The

Compay also has established policies and procedures that relate to the approval of any new Level 3 assets in which the Plan is permitted to invest.

5. Investments (unaudited)

Other than the fair values of the commingled funds and limited partnership interests and the related interest and net appreciation or depreciation, all investment information for the Plan disclosed in the accompanying financial statements and supplemental schedules, including investments held at December 31, 2016 and 2015, and net appreciation in fair value of investments and interest and dividends for the years ended December 31, 2016 and 2015, was obtained or derived from information provided to the plan administrator and certified as complete and accurate by the Trustee.

The following investment information was not certified by the Trustee:

	December 31,	
	2016	2015
IR&M Long Government Credit Fund LLC	$ 6,951,284	$ 6,664,666
ABS Alpha Ltd. Global Equity Portfolio	4,673,770	4,812,207
Frontier Small Cap Value Fund, LP	3,713,495	2,855,134
Sanderson Intl. Value Group Trust Fund	3,566,071	3,729,493
Strategic Property Trust Fund of JPMC	3,413,869	4,608,499

	For the Year Ended December 31,	
	2016	2015
Net appreciation (depreciation) in fair value of:		
IR&M Long Government Credit Fund LLC	$ 472,867	$ (274,337)
ABS Alpha Ltd. Global Equity Portfolio	(138,436)	184,567
Frontier Small Cap Value Fund, LP	858,361	559,970
Sanderson Intl. Value Group Trust Fund	146,905	(183,803)
Strategic Property Trust Fund of JPMC	263,874	609,368

6. Transactions with Parties-in-Interest

Fees paid during the year for services rendered by parties-in-interest were based on customary and reasonable rates for such services. Certain of the Plan's investments are managed by the Trustee. These transactions qualify as party-in-interest transactions; however, they are exempt from the prohibited transactions rules under ERISA.

7. Tax Status

The Plan received a determination letter from the Internal Revenue Service (the "IRS") dated December 28, 2012, stating that the Plan is qualified under Section 401(a) of the Internal Revenue Code (the "Code") and, therefore, the related trust is exempt from taxation. Subsequent to this determination by the IRS, the Plan was amended. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualification. The Plan administrator and the Plan's tax counsel believe the Plan is being operated in compliance with the applicable requirements of the Code and, therefore, believe that the Plan, as amended, is qualified and the related trust is tax-exempt.

Accounting principles generally accepted in the United States of America 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, 2016 and 2015, 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.

Aleris Cash Balance Plan

EIN # 27-1539745 Plan # 008

Schedule H, Line 4i – Schedule of Assets (Held at End of Year)

As of December 31, 2016

(a)	(b) Identity of Issue, Borrower, Lessor, or Similar Party	(c) Description of Investment, Including Maturity Date, Rate of Interest, Collateral, Par, or Maturity Value	(d) Cost	(e) Current Value
	Interest-Bearing Cash			
*	Wells Fargo Bank Collateralized Instl Bank Deposit		$ 679,420	$ 679,420
	Mutual Funds			
	Templeton Instl Foreign Small Company Fund	45,912 shares	957,394	915,026
	Vanguard 500 Index Fund	18,568 shares	3,543,643	3,835,673
*	Wells Fargo Adv Emerging Markets Equity Fund	45,494 shares	809,811	897,604
	William Blair Mid Cap Growth Fund	80,473 shares	944,688	901,301
			6,255,536	6,549,604
	Commingled Funds			
	ABS Alpha Ltd. Global Equity Portfolio	30,124 shares	4,812,207	4,673,770
	Sanderson Intl. Value Group Trust Fund	130,549 shares	3,419,166	3,566,071
	Strategic Property Trust Fund of JPMC	1,130 shares	3,149,995	3,413,869
			11,381,368	11,653,710
	Limited Partnership Interests			
	Frontier Small Cap Value Fund, L.P.	1,810,000 shares	2,855,134	3,713,495
	IR&M Long Government Credit Fund LLC	655,118 shares	6,478,417	6,951,284
			9,333,551	10,664,779
			$ 27,649,875	$ 29,547,513

* Denotes a party-in-interest to the Plan.

Aleris Cash Balance Plan

EIN # 27-1539745 Plan # 008

Schedule H, Line 4j – Schedule of Reportable Transactions

Year Ended December 31, 2016

(a) / (b) Identity of Party Involved/ Description of Asset	(c) Purchase Price	(d) Selling Price	(e) Cost of Asset	(f) Current Value of Asset on Transaction Date	(g) Net Gain (Loss)
Category 1 – Single transactions in excess of 5% of plan assets					
Strategic Property Trust Fund of JPMC	$ -	$ 1,500,000	$ 1,127,612	$ 1,500,000	$ 372,388
Wells Fargo Bank Collateralized Instl Bank Deposit	1,500,134	-	1,500,134	1,500,134	-
Category 3 – Series of transactions in excess of 5% of plan assets					
Strategic Property Trust Fund of JPMC	-	1,545,893	1,162,524	1,545,893	383,369
Wells Fargo Bank Collateralized Instl Bank Deposit	4,291,259	-	4,291,259	4,291,259	-
Wells Fargo Bank Collateralized Instl Bank Deposit	-	3,964,365	3,964,365	3,964,365	-

There were no category 2 or 4 reportable transactions during 2016.

Columns for “Lease rental” and “Expense incurred with transaction” are not applicable.

Schedule SB, line 26 — Schedule of Active Participant Data

Attained age	Years of credited service										
	Under 1	**1–4**	**5–9**	**10–14**	**15–19**	**20–24**	**25–29**	**30–34**	**35–39**	**40 & up**	**Total**
Under 25											
25–29											
30–34											
35–39			2								2
40–44		1	2	4	1						8
45–49		3	5	2	8						18
50–54		2	5	2	12	2					23
55–59		8	10	2	7	3	5				35
60–64		1	3	4	5	3	5	2	1		24
65–69			1		1		1		1		4
70 & up					1	1					2
Total		15	28	14	35	9	11	2	2		116

In each cell, the number shown is the count of active participants for each age/service combination.

Schedule SB, Part V — Statement of Actuarial Assumptions/Methods

Actuarial Assumptions

Discount rate sponsor elections

- Segment rates or full yield curve: Segment
- Look-back months: 0

	Stabilized	Nonstabilized
• First 5 years	4.43%	1.41%
• Next 15 years	5.91%	3.96%
• Over 20 years	6.65%	4.97%

Rationale: Interest rate prescribed by IRS.

Mortality sponsor elections

- Healthy participants: Section 430(h)(3) prescribed separate annuitant and non-annuitant mortality tables. These tables are based on the RP-2000 mortality tables projected with mortality improvement to the valuation year plus 7 and 15 years based on Scale AA.

Rationale: Prescribed by the IRS.

Cash balance plans

- Interest accumulation rate: 3.50%

Rationale: The cash balance plan interest crediting rate assumption is based on the historical spread between high quality corporate bonds and the plan defined interest crediting rate. The interest crediting rate assumption is determined by applying the historical spread to the discount rate used for disclosure as this rate is based on high quality corporate bond yields. The resulting Aleris Cash Balance Plan assumed interest crediting rate will not be lower than 3.50%, the approximate minimum interest crediting rate defined in the plan.

Other economic assumptions

- Expected investment return: 8.00% per year for year 2014 and 2015
  7.75% per year for year 2016
  (limited to the 3rd segment rate)

Rationale: Based on a blend of the hypothetical past performance of the plan's target asset mix and the median simulated investment return using capital market assumptions published in Mercer Investment Consulting's Capital Markets Outlook for the plan's target asset mix.

Schedule SB, Part V — Statement of Actuarial Assumptions/Methods

- Expenses

$367,553 added to current year normal cost

Rationale: Expenses are based on year-by-year experience for actual administrative expenses paid from plan assets. Adjustments are made for any known significant changes.

Demographic assumptions

- Withdrawal

Attained age	Percentage All
20	6.39%
25	4.76%
30	3.31%
35	2.80%
40	2.57%
45	2.33%
50	2.10%
55	1.87%

Rationale: The termination table is based on the Society of Actuaries 2003 ultimate turnover table with adjustments. Annual review of the experiences has shown that this table produced a reasonable approximation of the rates of termination experienced by the plan.

- Retirement age

Attained age	Percentage All
Under 55	0%
55	10%
56	5%
57	5%
58	5%
59	5%
60	15%
61	10%
62	25%
63	10%
64	10%
65 and above	100%

Schedule SB, Part V — Statement of Actuarial Assumptions/Methods

Rationale: Retirement rates have been developed based on the actuary's experience with similar plans and age social insurance programs are first available. Annual review of the plan experience has shown that these rates provide similar results to the actual rates of retirement experienced under the plan.

- Benefit commencement age for
  - Future vested deferred: Immediately
  - Current vested deferred: 65

	Male participants	Female participants
• Spouse assumptions		
— Percentage married	85%	85%
— Spouse age difference	3 years younger	3 years older

Form of payment	Lump sum	Single life
• Active retirements	100%	0%
• Future vested deferred	100%	0%
• Future deaths	100%	0%
• Current vested deferred (account balance)	100%	0%
• Current Vested Deferred(annuity)	0%	100%

Rationale: 100% of participants with cash balance are assumed to elect a lump sum, based on experience that shows relatively fewer participants elect the actuarially equivalent annuity options.

Unpredictable contingent event assumptions: Not applicable

At-risk assumptions: (Not Applicable for this valuation – for reference only)

- Special retirement rates: Active and deferred inactive participants who are eligible for immediate retirement and withdrawal benefits in the first 11 plan years are assumed to 100% retire in the first year of eligibility following the valuation year.
- Most valuable form of payment

	Males	Females
Actives and deferred vested with cash balance account	Cash Balance account	Under 64: Cash Balance account Over 64: Life Annuity
Deferred vested without cash balance account	Under 65: Life Annuity Over 65: Lump Sum	Life Annuity

Schedule SB, Part V — Statement of Actuarial Assumptions/Methods

Actuarial Methods

Asset Methods

The asset valuation method is an average of the adjusted market value for each year during the last two years preceding the valuation date. The adjusted market value is the market value at each determination date adjusted to the valuation date based on actual cash flows and expected interest at the lesser of the expected rate of return and the third segment rate. This amount is adjusted to be no greater than 110% and no less than 90% of the fair market value, as defined in IRC Section 430.

A characteristic of this asset method is that, over time, it is slightly more likely to produce an actuarial value of assets that is less than the market value of assets than an actuarial value that is greater than the market value.

Participant Methods

Participants or former participants are included or excluded from the valuation as described below:

- **Participants included:** The plan sponsor provides us with data on all employees participating in the plan as of the valuation date.
- **Participants excluded:** No actuarial liability is included for nonvested participants who terminated prior to the valuation date. For this purpose, participants with a break in service on the valuation date are treated as terminated participants.
- **Insurance contracts:** The plan does not have any insurance contracts.

Minimum Funding Methods

The funding target for minimum funding calculations is computed using the traditional unit credit method of funding. The objective under this method is to fund each participant's benefits under the plan as they accrue. Thus, the total pension to which each participant is expected to become entitled at retirement is broken down into units, each associated with a year of past or future credited service.

A detailed description of the calculation follows:

- The plan's valuation date is the beginning of the plan year.
- An individual's **funding target** is the present value of future benefits based on credited service and average pay as of the beginning of the plan year, and an individual's **target normal cost** is the present value of the benefit expected to accrue in the plan year. If multiple decrements are used, the funding target and the target normal cost for an individual are the sum of the component funding targets and target normal costs associated with the various anticipated separation dates.
- The plan's **target normal cost** is the sum of the individual target normal costs, and the plan's **funding target** is the sum of the individual funding targets for all participants under the plan.

Aleris Cash Balance Plan

EIN # 27-1539745 Plan # 008

Schedule H, Line 4j – Schedule of Reportable Transactions

Year Ended December 31, 2016

(a) / (b) Identity of Party Involved/ Description of Asset	(c) Purchase Price	(d) Selling Price	(e) Cost of Asset	(f) Current Value of Asset on Transaction Date	(g) Net Gain (Loss)
Category 1 – Single transactions in excess of 5% of plan assets					
Strategic Property Trust Fund of JPMC	$ -	$ 1,500,000	$ 1,127,612	$ 1,500,000	$ 372,388
Wells Fargo Bank Collateralized Instl Bank Deposit	1,500,134	-	1,500,134	1,500,134	-
Category 3 – Series of transactions in excess of 5% of plan assets					
Strategic Property Trust Fund of JPMC	-	1,545,893	1,162,524	1,545,893	383,369
Wells Fargo Bank Collateralized Instl Bank Deposit	4,291,259	-	4,291,259	4,291,259	-
Wells Fargo Bank Collateralized Instl Bank Deposit	-	3,964,365	3,964,365	3,964,365	-

There were no category 2 or 4 reportable transactions during 2016.

Columns for “Lease rental” and “Expense incurred with transaction” are not applicable.

SCHEDULE SB (Form 5500)	Single-Employer Defined Benefit Plan Actuarial Information	OMB No. 1210-0110
Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500 or 5500-SF.	2016 This Form is Open to Public Inspection

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

▶ **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	B Three-digit plan number (PN) ▶
ALERIS CASH BALANCE PLAN	008
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF	**D** Employer Identification Number (EIN)
ALERIS ROLLED PRODUCTS, INC.	27-1539745

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 2016

2 Assets:

a Market value	2a	30,362,418
b Actuarial value	2b	31,936,567

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	356	22,109,038	22,109,038
b For terminated vested participants	251	5,088,565	5,088,565
c For active participants	116	5,694,027	5,694,027
d Total	723	32,891,630	32,891,630

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	5.83%
6 Target normal cost	6	367,553

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

Nicholas Fries — Signature of actuary

9/22/2017 — Date

NICHOLAS FRIES — Type or print name of actuary

1707926 — Most recent enrollment number

MERCER — Firm name

216-830-8031 — Telephone number (including area code)

200 PUBLIC SQUARE, SUITE 3760

CLEVELAND OH 44114 — 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 0.25%	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)		1,157
	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 6.05%		70
	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		1,227
	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	97.09%
15	Adjusted funding target attainment percentage	15	97.09%
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	94.42%
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
04/08/2016	427,000	0			
07/14/2016	108,000	0			
10/11/2016	267,000	0			
01/18/2017	267,000	0			
09/13/2017	170,000	0			
			Totals ► 18(b)	1,239,000	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	1,186,805

20 Quarterly contributions and liquidity shortfalls:

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

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

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

Liquidity shortfall as of end of quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th
0	0	0	0

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

21 Discount rate:

	1st segment:	2nd segment:	3rd segment:	
a Segment rates:	4.43 %	5.91 %	6.65%	☐ N/A, full yield curve used

b Applicable month (enter code)	**21b**	0
22 Weighted average retirement age	**22**	61

23 Mortality table(s) (see instructions) ☐ 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**	367,553
b Excess assets, if applicable, but not greater than line 31a	**31b**	0

32 Amortization installments:	Outstanding Balance	Installment
a Net shortfall amortization installment	955,063	818,397
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**	0
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	**34**	1,185,950

	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**	1,185,950
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	1,186,805
38 Present value of excess contributions for current year (see instructions)		
a Total (excess, if any, of line 37 over line 36)	**38a**	855
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	**38b**	
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

42 Amount of acceleration adjustment	**42**	
43 Excess installment acceleration amount to be carried over to future plan years	**43**	

Schedule SB, line 19 — Discounted Employer Contributions

Date	Amount contributed	Plan year	Applicable effective interest rate	Discounted value on January 1, 2016
04/08/2016	$ 427,000	2016	5.83%	$ 420,570
07/14/2016	108,000	2016	5.83%	104,788
10/11/2016	267,000	2016	5.83%	255,515
1/18/2017*	267,000	2016	10.83%	251,532
9/13/2017	170,000	2016	5.83%	154,400
Total	**$ 1,239,000**			**$ 1,186,805**

***** In determining the discounted value, 10.83% (EIR plus 5%) was applied for the days that the contribution was late, while 5.83% was applied from the quarterly contribution due date back to the valuation date.

Schedule SB, line 22 — Description of Weighted Average Retirement Age

Each employee is assumed to retire in accordance with the table of retirement rates. The proportion of employees expected to retire at each potential retirement age is shown below. The average retirement age is 61.

(A) Retirement age	(B) Retirement Percent	(C) Lx	(D) Number of employees expected to retire (B) x (C)	(E) (A) x (D)
55	10.0%	100,000	10,000	550,000
56	5.0%	90,000	4,500	252,000
57	5.0%	85,500	4,275	243,675
58	5.0%	81,225	4,061	235,538
59	5.0%	77,164	3,858	227,622
60	15.0%	73,306	10,996	659,760
61	10.0%	62,310	6,231	380,091
62	25.0%	56,079	14,020	869,240
63	10.0%	42,059	4,206	264,978
64	10.0%	37,853	3,785	242,240
65	100.0%	34,068	34,068	2,214,420
Total			100,000	6,139,564
Average				61.40

Note: Column (D) is the product of columns (B) and (C). Column (E) is the product of column (A) and (D). The average retirement age is the total from column (E) divided by the total column (D).

Schedule SB, Part V — Summary of Plan Provisions

Summary of Major Plan Provisions

Effective date and plan year	Original plan: January 1, 1962 Restated plan: January 1, 2015 Plan year: January 1 – December 31
Status of the plan	The plan was frozen effective January 1, 2007
Significant events that occurred during the year	None
Definitions	
• Eligibility	All salaried employees are eligible to participate at hire date. Barmet, Alflex, and Concast employees are not eligible to participate until the later of their hire date or January 1, 1998. Employees who are hired on or after December 9, 2004 are not eligible to participate in the plan.
• Employee contributions	Not applicable
• Vesting service	For periods prior to January 1, 1994, one year of Vesting Service is granted for each vesting computation period (any 12-month period beginning on a participant's date of hire or anniversary thereof) during which the participant has at least 1,000 Hours of Service. A partial year of Vesting Service is granted between 173.33 and 999 hours worked. For periods after December 31, 1993, Vesting Service will be granted in full years only, contingent upon at least 1,000 Hours of Service in any such year. For periods after January 1, 2007, all participants who have an Hour of Service will be fully vested after completing 3 years of vesting service.
• Credited service	For periods prior to January 1, 1994, one year of Credited Service is granted for each 12-month period beginning on a Participant's date of hire or any anniversary thereof during which the Participant works 2,080 hours. A partial Year of Credited Service is granted if the Participant has less than 2,080 Hours of Service rounded up to the nearest 1/12 of 2,080. For periods after December 31, 1993, Credited Service will be granted in full years only, contingent upon at least 1,000 Hours of Service in any such years. For periods after December 31, 1993, Credited Service will be granted in full years only, contingent upon at least 1,000 Hours of Service in any such years. Effective January 1, 2007, no further Credited Service shall be earned.

Schedule SB, Part V — Summary of Plan Provisions

• Compensation considered	Annual earnings paid to an employee including overtime, shift differential, commissions, qualified plan salary deferrals, severance pay and all bonuses. However, Pensionable Earnings shall exclude items of imputed income, expense allowance and reimbursement for compensation in lieu of vacation time, taxable fringe benefits distributions from deferred compensation plans, deferrals to nonqualified deferred compensation plans, short-term and long-term disability pay and other welfare benefit plans. All compensation is limited to the amount specified in code section 401(a)(17).
• Final Earnings	The average of Pensionable Earnings over the 5 complete consecutive calendar years preceding termination of employment that produce the highest average. If the Participant did not work 5 complete calendar years, all complete calendar years shall be averaged. Final earnings are frozen at January 1, 2007.
• Social Security Covered Compensation	Covered Compensation developed without rounding as published each year by the IRS. This table is subject to annual changes.

Schedule SB, Part V — Summary of Plan Provisions

- Accrued benefit

For periods prior to January 1, 1998 and after December 31, 1992:
1.15% of a participant's Final Average Pensionable Earnings multiplied by Credited Service.
Plus 0.45% of his Final Average Pensionable Earnings in excess of his Covered Compensation, multiplied by Credited Service not exceeding 35 years.
For periods after December 31, 1997:
The accrued benefit as of January 1, 1998 converted to a cash account balance using an interest rate of 5.81%. Future interest that is accrued uses a guaranteed rate of return which is the lesser of: (a) average of prior year's 3-Year Treasuries; (b) 30-Year Treasury rate of prior November 1. This rate applies for the following calendar year.
Benefit credits accrued are based on age:

Age	Percent of salary
0 – 39	3.50%
40 – 46	4.50%
47 – 49	4.90%
40 – 54	6.00%
55+	8.00%

Benefits credits are frozen as of January 1, 2007.
Interest is earned on the balance at the beginning of the year. No interest is earned on the benefit credit of the current year.
The Normal Retirement Benefit is the cash account balance converted to life annuity using the blended (50% Male / 50% Female) 1983 GAM table and the lesser of 6% and the applicable interest rate.

Grandfathered Participants:
Participants who have attained age 55 and have 15 years of Vesting Service as of December 31, 1997 will receive the better of the old plan with continued service credits and the cash balance plan. In no event will the benefit be less than the accrued benefit as of December 31, 1993 as calculated under the plan formula and salary limits in effect on that date.

For actives going out under retirement decrement over 63 years, there is an increase in the lump sum that is offered to participants by converting the cash balance to an age 65 accrued benefit and using the 417e rates to determine the lump sum.

Schedule SB, Part V — Summary of Plan Provisions

Normal Retirement	
• Eligibility	The first day of the month coincident with or next following attainment of age 65. At the option of the Participant, the January 1 following attainment of age 65.
• Benefit	Equal to the participant's Accrued Benefit
Early retirement	
• Eligibility	The first day of any month following attainment of age 55 and completion of 5 years of Credited Service.
• Benefit	Accrued Benefit at Early Retirement Date reduced by 5% for each year that commencement precedes attainment of age 62. A terminated vested participant may elect to receive a reduced benefit payable at any time following attainment of age 55. The benefit is reduced by 5% for each year that commencement precedes Normal Retirement Date. For vested Participants who terminated prior to 1994, the 5% figure above is reduced by 1/10% for each year of Credited Service in excess of 5, but such figure will not be reduced below 2 1/2%.
Late retirement	
• Eligibility	The first day of the month coincident with or immediately following the participant's attainment of Normal Retirement Eligibility.
• Benefit	Accrued Benefit at Late Retirement Date.
Deferred vested	
• Eligibility	Prior to January 1, 2007 100% vested at the earlier of five years of vesting service or age 65. After January 1, 2007 100% vested at the earlier of three years of vesting service or age 65.
• Benefit	Accrued Benefit based upon Credited Service, Final Average Pensionable Earnings and Covered Compensation as of date of termination.
Pre-retirement death	
• Eligibility	Eligible for Early Retirement
• Benefit	Greater of: 1. The Accrued Benefit the participant would have received had he terminated employment on his date of death, survived to his earliest commencement date, and elected a 75% Joint and Survivor annuity. 2. The account balance.
Form of benefits	
• Automatic form for unmarried participants	Life Annuity

Schedule SB, Part V — Summary of Plan Provisions

• Automatic form for married participants	50% Joint and Survivor Annuity
• Optional forms	• Life Annuity • 50%, 66 2/3%, 75% or 100% Joint and Survivor Annuity • Life Annuity with 5 or 10 years certain • Social Security Level Income Annuity • Lump Sum
• Optional form conversion factors	For purposes of converting a Cash Balance Account to the Normal form: • GAM83 (50/50) and the lesser of 6% and phased-in 417(e) Rates as of the November preceding the beginning of the plan year. For optional form conversion factors: • GAM71 (male) and 5.5%
Miscellaneous	
• Maximum benefits	Annual benefits may not exceed the limits in IRC Section 415. This limit is indexed annually. For 2016 the limit is $210,000.
• Administration	Administered by the Benefit Committee
• Funding medium	Trust
• Benefits not included in valuation	None

Benefits Included or Excluded

Unless noted below, all benefits provided by the plan, as restated, are included in this valuation.

- **Plan amendments excluded:** Amendments adopted after the valuation date or effective after the current plan year are excluded from the valuation.
- **Late retirement increases:**
  - *Active participants:* The plan provides benefit suspension notices to participants who work beyond normal retirement; therefore, late retirement actuarial increases only apply to participants who defer retirement beyond age 70½.
  - *Deferred vested participants:* Current deferred vested participants over normal retirement age are not valued including the late retirement actuarial increase because it is deemed immaterial.
- **Internal Revenue Code limitations:** The limitations of Internal Revenue Code Section 415(b) and 401(a)(17) have been incorporated into our calculations.
- **IRC Section 416 rules for top-heavy plans:** We did not test whether this plan is top-heavy (when the present value of benefits for key employees equals or exceeds 60 percent of the present value for all participants). However, we expect that the plan is not top-heavy due to the large number of rank-and-file participants; therefore, the funding target and target normal cost do not reflect any liability for top-heavy benefit accruals.

- **IRC Section 436 benefit restrictions:**
  - *Unpredictable contingent event benefits:* This plan does not have any unpredictable contingent event benefits.

Schedule SB, Part V — Summary of Plan Provisions

- *Prohibited payments:* Limitations on prohibited benefits (if any) are reflected for annuity starting dates before the valuation date but are ignored for annuity starting dates on or after the valuation date.
- *Benefit accruals:* The plan's funding target does not reflect any limitation on benefit accruals. The target normal cost does not reflect any limitation on benefit accruals.

Plan Provisions Changes Since Prior Valuation

No plan provisions have changed since the January 1, 2015 valuation.

Aleris Cash Balance Plan

EIN # 27-1539745 Plan # 008

Schedule H, Line 4i – Schedule of Assets (Held at End of Year)

As of December 31, 2016

(a)	(b) Identity of Issue, Borrower, Lessor, or Similar Party	(c) Description of Investment, Including Maturity Date, Rate of Interest, Collateral, Par, or Maturity Value	(d) Cost	(e) Current Value
	Interest-Bearing Cash			
*	Wells Fargo Bank Collateralized Instl Bank Deposit		$ 679,420	$ 679,420
	Mutual Funds			
	Templeton Instl Foreign Small Company Fund	45,912 shares	957,394	915,026
	Vanguard 500 Index Fund	18,568 shares	3,543,643	3,835,673
*	Wells Fargo Adv Emerging Markets Equity Fund	45,494 shares	809,811	897,604
	William Blair Mid Cap Growth Fund	80,473 shares	944,688	901,301
			6,255,536	6,549,604
	Commingled Funds			
	ABS Alpha Ltd. Global Equity Portfolio	30,124 shares	4,812,207	4,673,770
	Sanderson Intl. Value Group Trust Fund	130,549 shares	3,419,166	3,566,071
	Strategic Property Trust Fund of JPMC	1,130 shares	3,149,995	3,413,869
			11,381,368	11,653,710
	Limited Partnership Interests			
	Frontier Small Cap Value Fund, L.P.	1,810,000 shares	2,855,134	3,713,495
	IR&M Long Government Credit Fund LLC	655,118 shares	6,478,417	6,951,284
			9,333,551	10,664,779
			$ 27,649,875	$ 29,547,513

* Denotes a party-in-interest to the Plan.

Schedule SB, line 32 — Schedule of Amortization Bases

The total shortfall amortization charge is the sum of the individual shortfall amortization installment for each plan year covered under PPA. Although an individual shortfall amortization installment can be negative, the combined shortfall amortization charge cannot be less than $0.

Shortfall bases					
Year established		**Outstanding balance**	**Years remaining**		**2016 Installment**
2010	$	462,498	1	$	462,498
2011		1,521,588	2		777,280
2012		(1,485,686)	3		(516,843)
2013		127,191	4		33,894
2014		311,309	5		67,773
2015		(420,203)	6		(78,633)
2016		438,366	7		72,428
Total	$	955,063		$	818,397

Schedule SB, line 24 — Change in Actuarial Assumptions

The expense component of normal cost increased from $332,320 to $367,553 to reflect our expectations for the current plan year.