

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 2019 This Form is Open to Public Inspection
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Part I	Annual Report Identification Information For calendar plan year 2019 or fiscal plan year beginning <u>01/01/2019</u> and ending <u>12/31/2019</u>
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.) ☒ 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:	☒ Form 5558 ☐ automatic extension ☐ the DFVC program ☐ special extension (enter description)

Part II	Basic Plan Information —enter all requested information		
1a Name of plan <u>FERRO CORPORATION 401(K) PLAN</u>	1b Three-digit plan number (PN) ▶	<u>031</u>	
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) <u>FERRO CORPORATION</u> <u>6060 PARKLAND BLVD</u> <u>MAYFIELD HEIGHTS, OH 44124</u>	1c Effective date of plan <u>01/01/1984</u>	2b Employer Identification Number (EIN) <u>34-0217820</u>	2c Plan Sponsor's telephone number <u>216-875-5600</u>
		2d Business code (see instructions) <u>327900</u>	

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.	<u>10/09/2020</u>	<u>JOSE TORTAJADA</u>
	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
	Signature of DFE	Date	Enter name of individual signing as DFE

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

Form 5500 (2019)
v. 190130

3a Plan administrator's name and address ☒ Same as Plan Sponsor	3b Administrator's EIN 3c Administrator's telephone number
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report: a Sponsor's name c Plan Name	4b EIN 4d PN
5 Total number of participants at the beginning of the plan year	5 1242
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 a(2) Total number of active participants at the end of the plan year b Retired or separated participants receiving benefits..... c Other retired or separated participants entitled to future benefits d Subtotal. Add lines 6a(2) , 6b , and 6c e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits. f Total. Add lines 6d and 6e g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item) h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	6a(1) 759 6a(2) 636 6b 24 6c 462 6d 1122 6e 10 6f 1132 6g 1094 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: 2A 2E 2F 2G 2J 2K 2O 2T b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:	
9a Plan funding arrangement (check all that apply) (1) ☒ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor	9b Plan benefit arrangement (check all that apply) (1) ☒ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor

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

a Pension Schedules

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

b General Schedules

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

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

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

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

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

11c Enter the Receipt Confirmation Code for the 2019 Form M-1 annual report. If the plan was not required to file the 2019 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 A (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Insurance 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. ▶ Insurance companies are required to provide the information pursuant to ERISA section 103(a)(2).	OMB No. 1210-0110 2019 This Form is Open to Public Inspection
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For calendar plan year 2019 or fiscal plan year beginning 01/01/2019 and ending 12/31/2019	
A Name of plan FERRO CORPORATION 401(K) PLAN	B Three-digit plan number (PN) ▶ 031
C Plan sponsor's name as shown on line 2a of Form 5500 FERRO CORPORATION	D Employer Identification Number (EIN) 34-0217820

Part I	Information Concerning Insurance Contract Coverage, Fees, and Commissions Provide information for each contract on a separate Schedule A. Individual contracts grouped as a unit in Parts II and III can be reported on a single Schedule A.
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1 Coverage Information:

(a) Name of insurance carrier PRINCIPAL LIFE INSURANCE COMPANY
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(b) EIN	(c) NAIC code	(d) Contract or identification number	(e) Approximate number of persons covered at end of policy or contract year	Policy or contract year	
				(f) From	(g) To
42-0127290	61271	628100	0	01/01/2019	12/31/2019

2 Insurance fee and commission information. Enter the total fees and total commissions paid. List in line 3 the agents, brokers, and other persons in descending order of the amount paid.

(a) Total amount of commissions paid	(b) Total amount of fees paid

3 Persons receiving commissions and fees. (Complete as many entries as needed to report all persons).
(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

Part II Investment and Annuity Contract Information

Where individual contracts are provided, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

4 Current value of plan's interest under this contract in the general account at year end **4** 0**5** Current value of plan's interest under this contract in separate accounts at year end **5** 0**6** Contracts With Allocated Funds:**a** State the basis of premium rates ▶**b** Premiums paid to carrier **6b****c** Premiums due but unpaid at the end of the year **6c****d** If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, enter amount. **6d**
Specify nature of costs ▶**e** Type of contract: (1) ☐ individual policies (2) ☐ group deferred annuity(3) ☐ other (specify) ▶**f** If contract purchased, in whole or in part, to distribute benefits from a terminating plan, check here ▶ ☐**7** Contracts With Unallocated Funds (Do not include portions of these contracts maintained in separate accounts)**a** Type of contract: (1) ☐ deposit administration (2) ☐ immediate participation guarantee
(3) ☐ guaranteed investment (4) ☒ other ▶ **GUARANTEED INTEREST CONTRACT****b** Balance at the end of the previous year **7b** 14005977**c** Additions: (1) Contributions deposited during the year **7c(1)**
(2) Dividends and credits **7c(2)**
(3) Interest credited during the year **7c(3)** 200267
(4) Transferred from separate account **7c(4)**
(5) Other (specify below) **7c(5)**
▶(6) Total additions **7c(6)** 200267**d** Total of balance and additions (add lines **7b** and **7c(6)**) **7d** 14206244**e** Deductions:
(1) Disbursed from fund to pay benefits or purchase annuities during year **7e(1)**
(2) Administration charge made by carrier **7e(2)**
(3) Transferred to separate account **7e(3)**
(4) Other (specify below) **7e(4)**
▶(5) Total deductions **7e(5)** 0**f** Balance at the end of the current year (subtract line **7e(5)** from line **7d**) **7f** 14206244

Part III Welfare Benefit Contract Information

If more than one contract covers the same group of employees of the same employer(s) or members of the same employee organizations(s), the information may be combined for reporting purposes if such contracts are experience-rated as a unit. Where contracts cover individual employees, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

8 Benefit and contract type (check all applicable boxes)

- a** ☐ Health (other than dental or vision)
 b ☐ Dental
 c ☐ Vision
 d ☐ Life insurance
e ☐ Temporary disability (accident and sickness)
 f ☐ Long-term disability
 g ☐ Supplemental unemployment
 h ☐ Prescription drug
i ☐ Stop loss (large deductible)
 j ☐ HMO contract
 k ☐ PPO contract
 l ☐ Indemnity contract
m ☐ Other (specify) ▶

9 Experience-rated contracts:

a Premiums: (1) Amount received.....	9a(1)		
(2) Increase (decrease) in amount due but unpaid.....	9a(2)		
(3) Increase (decrease) in unearned premium reserve	9a(3)		
(4) Earned ((1) + (2) - (3)).....		9a(4)	0
b Benefit charges (1) Claims paid.....	9b(1)		
(2) Increase (decrease) in claim reserves.....	9b(2)		
(3) Incurred claims (add (1) and (2))		9b(3)	0
(4) Claims charged		9b(4)	
c Remainder of premium: (1) Retention charges (on an accrual basis) --			
(A) Commissions	9c(1)(A)		
(B) Administrative service or other fees.....	9c(1)(B)		
(C) Other specific acquisition costs	9c(1)(C)		
(D) Other expenses.....	9c(1)(D)		
(E) Taxes	9c(1)(E)		
(F) Charges for risks or other contingencies.....	9c(1)(F)		
(G) Other retention charges	9c(1)(G)		
(H) Total retention.....		9c(1)(H)	0
(2) Dividends or retroactive rate refunds. (These amounts were ☐ paid in cash, or ☐ credited.).....		9c(2)	
d Status of policyholder reserves at end of year: (1) Amount held to provide benefits after retirement		9d(1)	
(2) Claim reserves		9d(2)	
(3) Other reserves.....		9d(3)	
e Dividends or retroactive rate refunds due. (Do not include amount entered in line 9c(2).)		9e	

10 Nonexperience-rated contracts:

a Total premiums or subscription charges paid to carrier	10a	
b If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, other than reported in Part I, line 2 above, report amount.....	10b	

Specify nature of costs.

Part IV Provision of Information

11 Did the insurance company fail to provide any information necessary to complete Schedule A? ☐ Yes ☒ No

12 If the answer to line 11 is "Yes," specify the information not provided. ▶

SCHEDULE C (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Service Provider 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
		2019
		This Form is Open to Public Inspection.

For calendar plan year 2019 or fiscal plan year beginning 01/01/2019 and ending 12/31/2019		
A Name of plan FERRO CORPORATION 401(K) PLAN	B Three-digit plan number (PN) ▶	031
C Plan sponsor's name as shown on line 2a of Form 5500 FERRO CORPORATION	D Employer Identification Number (EIN) 34-0217820	

Part I	Service Provider Information (see instructions)
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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)..... ☒ 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
GREAT WEST LIFE & ANNUITY INS CO
84-0467907

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

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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)

GREAT-WEST LIFE & ANNUITY INS CO

84-0467907

(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?
15 37 50 64	NONE	81064	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

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

SQUIRE PATTON BOGGS US LLP

34-0648199

(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?
29 50	NONE	25446	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

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

SEI INVESTMENTS COMPANY

23-1707341

(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?
28 51	NONE	20000	Yes ☐ No ☒	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)

BDO USA LLP

13-5381590

(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 50	NONE	19800	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 ☐

(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 2019 This Form is Open to Public Inspection.
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For calendar plan year 2019 or fiscal plan year beginning 01/01/2019 and ending 12/31/2019

A Name of plan <u>FERRO CORPORATION 401(K) PLAN</u>	B Three-digit plan number (PN) ►	<u>031</u>
C Plan or DFE sponsor's name as shown on line 2a of Form 5500 <u>FERRO CORPORATION</u>	D Employer Identification Number (EIN) <u>34-0217820</u>	

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)
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a Name of MTIA, CCT, PSA, or 103-12 IE: <u>EQUITY INDEX FUND Q</u>		
b Name of sponsor of entity listed in (a): <u>BLACKROCK INSTITUTIONAL TRUST COMPANY, N.A.</u>		
c EIN-PN <u>94-3392410-001</u>	d Entity code <u>C</u>	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>32587874</u>
a Name of MTIA, CCT, PSA, or 103-12 IE: <u>EXTENDED EQUITY MARKET K</u>		
b Name of sponsor of entity listed in (a): <u>BLACKROCK INSTITUTIONAL TRUST COMPANY, N.A.</u>		
c EIN-PN <u>94-3199860-001</u>	d Entity code <u>C</u>	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>14871186</u>
a Name of MTIA, CCT, PSA, or 103-12 IE: <u>PUTNAM STABLE VALUE FUND</u>		
b Name of sponsor of entity listed in (a): <u>PUTNAM FIDUCIARY TRUST COMPANY</u>		
c EIN-PN <u>04-3159710-202</u>	d Entity code <u>C</u>	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>1842758</u>
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
a Name of MTIA, CCT, PSA, or 103-12 IE:		
b Name of sponsor of entity listed in (a):		
c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

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

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

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

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

SCHEDULE H (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Financial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500.	OMB No. 1210-0110 2019 This Form is Open to Public Inspection
For calendar plan year 2019 or fiscal plan year beginning 01/01/2019 and ending 12/31/2019		
A Name of plan FERRO CORPORATION 401(K) PLAN	B Three-digit plan number (PN) ►	031
C Plan sponsor's name as shown on line 2a of Form 5500 FERRO CORPORATION	D Employer Identification Number (EIN) 34-0217820	

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	0	0
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions.....	1b(1)	1770504	1568770
(2) Participant contributions.....	1b(2)	35854	129131
(3) Other.....	1b(3)	0	0
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit).....	1c(1)	0	0
(2) U.S. Government securities	1c(2)	0	0
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)	0	0
(B) All other.....	1c(3)(B)	0	0
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)	0	0
(B) Common.....	1c(4)(B)	0	0
(5) Partnership/joint venture interests	1c(5)	0	0
(6) Real estate (other than employer real property).....	1c(6)	0	0
(7) Loans (other than to participants)	1c(7)	0	0
(8) Participant loans.....	1c(8)	1866256	1396553
(9) Value of interest in common/collective trusts	1c(9)	53342752	49301818
(10) Value of interest in pooled separate accounts	1c(10)	0	0
(11) Value of interest in master trust investment accounts	1c(11)	0	0
(12) Value of interest in 103-12 investment entities.....	1c(12)	0	0
(13) Value of interest in registered investment companies (e.g., mutual funds).....	1c(13)	106280569	114459124
(14) Value of funds held in insurance company general account (unallocated contracts).....	1c(14)	14005976	14206244
(15) Other.....	1c(15)	0	0

1d Employer-related investments:

		(a) Beginning of Year	(b) End of Year
(1) Employer securities	1d(1)	1336251	1036104
(2) Employer real property	1d(2)	0	0
e Buildings and other property used in plan operation	1e	0	0
f Total assets (add all amounts in lines 1a through 1e)	1f	178638162	182097744

Liabilities

g Benefit claims payable	1g	0	0
h Operating payables	1h	0	0
i Acquisition indebtedness	1i	0	0
j Other liabilities	1j	0	0
k Total liabilities (add all amounts in lines 1g through 1j)	1k	0	0

Net Assets

l Net assets (subtract line 1k from line 1f)	1l	178638162	182097744
---	-----------	-----------	-----------

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 Contributions:**

		(a) Amount	(b) Total
(1) Received or receivable in cash from: (A) Employers	2a(1)(A)	3462708	
(B) Participants	2a(1)(B)	4683351	
(C) Others (including rollovers)	2a(1)(C)	919896	
(2) Noncash contributions	2a(2)	0	
(3) Total contributions. Add lines 2a(1)(A) , (B) , (C) , and line 2a(2)	2a(3)		9065955

b Earnings on investments:**(1) Interest:**

(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)	0	
(B) U.S. Government securities	2b(1)(B)	0	
(C) Corporate debt instruments	2b(1)(C)	0	
(D) Loans (other than to participants)	2b(1)(D)	0	
(E) Participant loans	2b(1)(E)	70690	
(F) Other	2b(1)(F)	200267	
(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)		270957

(2) Dividends: (A) Preferred stock	2b(2)(A)	0	
(B) Common stock	2b(2)(B)	0	
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	4600008	
(D) Total dividends. Add lines 2b(2)(A) , (B) , and (C)	2b(2)(D)		4600008

(3) Rents	2b(3)		0
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(4) Net gain (loss) on sale of assets: (A) Aggregate proceeds	2b(4)(A)	251537	
(B) Aggregate carrying amount (see instructions)	2b(4)(B)	245422	
(C) Subtract line 2b(4)(B) from line 2b(4)(A) and enter result	2b(4)(C)		6115

(5) Unrealized appreciation (depreciation) of assets: (A) Real estate	2b(5)(A)	0	
(B) Other	2b(5)(B)	-57936	
(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)		-57936

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		12368009
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		0
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		0
(9) Net investment gain (loss) from 103-12 investment entities	2b(9)		0
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		18665247
c Other income	2c		28599
d Total income. Add all income amounts in column (b) and enter total	2d		44946954

Expenses

e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	41350922	
(2) To insurance carriers for the provision of benefits	2e(2)	0	
(3) Other	2e(3)	0	
(4) Total benefit payments. Add lines 2e(1) through (3)	2e(4)		41350922
f Corrective distributions (see instructions)	2f		6499
g Certain deemed distributions of participant loans (see instructions)	2g		-19059
h Interest expense	2h		0
i Administrative expenses: (1) Professional fees	2i(1)	67946	
(2) Contract administrator fees	2i(2)	0	
(3) Investment advisory and management fees	2i(3)	0	
(4) Other	2i(4)	81064	
(5) Total administrative expenses. Add lines 2i(1) through (4)	2i(5)		149010
j Total expenses. Add all expense amounts in column (b) and enter total	2j		41487372

Net Income and Reconciliation

k Net income (loss). Subtract line 2j from line 2d	2k		3459582
l Transfers of assets:			
(1) To this plan	2l(1)		0
(2) From this plan	2l(2)		0

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) ☐ Unmodified (2) ☐ Qualified (3) ☒ Disclaimer (4) ☐ Adverse

b Did the accountant perform a limited scope audit pursuant to 29 CFR 2520.103-8 and/or 103-12(d)?

☒ 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:

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.)

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.)

	Yes	No	Amount
4a		X	
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?	X		1000000
f Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?		X	
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.)	X		
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			

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

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

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

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

SCHEDULE R (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Retirement Plan Information This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110 2019 This Form is Open to Public Inspection.
For calendar plan year 2019 or fiscal plan year beginning 01/01/2019 and ending 12/31/2019		
A Name of plan FERRO CORPORATION 401(K) PLAN		B Three-digit plan number (PN) ▶ 031
C Plan sponsor's name as shown on line 2a of Form 5500 FERRO CORPORATION		D Employer Identification Number (EIN) 34-0217820
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): 84-1455663		
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
Part II	Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)	
4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ☐ Yes ☐ No ☐ N/A If the plan is a defined benefit plan, go to line 8.		
5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. Date: Month Day Year If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.		
6 a Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived)		6a
b Enter the amount contributed by the employer to the plan for this plan year		6b
c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount)		6c
If you completed line 6c, skip lines 8 and 9.		
7 Will the minimum funding amount reported on line 6c be met by the funding deadline? ☐ Yes ☐ No ☐ N/A		
8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ☐ Yes ☐ No ☐ N/A		
Part III	Amendments	
9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box. ☐ Increase ☐ Decrease ☐ Both ☐ No		
Part IV	ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.	
10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan? ☐ Yes ☒ No		
11 a Does the ESOP hold any preferred stock? ☒ Yes ☐ No		
b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.) ☐ Yes ☒ No		
12 Does the ESOP hold any stock that is not readily tradable on an established securities market? ☐ Yes ☒ No		
For Paperwork Reduction Act Notice, see the Instructions for Form 5500.		
Schedule R (Form 5500) 2019 v. 190130		

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

b The plan year immediately preceding the current plan year

c The second preceding plan year

14a**14b****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

b The corresponding number for the second preceding plan year

15a**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

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

16a**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): _____

- 20 PBGC missed contribution reporting requirements.** If this is a multiemployer plan or a single-employer plan that is not covered by PBGC, skip line 20.

- a** Is the amount of unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 greater than zero? ☐ Yes ☐ No

- b** If line 20a is "Yes," has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:

☐ Yes.

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

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

☐ No. Other. Provide explanation _____



Ferro Corporation 401(k) Plan

Financial Statements and Supplemental Schedule

Years Ended December 31, 2019 and 2018

Ferro Corporation 401(k) Plan

Financial Statements and Supplemental Schedule
Years Ended December 31, 2019 and 2018

Ferro Corporation 401(k) Plan

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Independent Auditor's Report

Ferro Corporation Retirement Committee
Ferro Corporation 401(k) Plan
Mayfield Heights, Ohio

Report on the Financial Statements

We were engaged to audit the accompanying financial statements of the Ferro Corporation 401(k) Plan ("the Plan"), which comprise the statements of net assets available for benefits as of December 31, 2019 and 2018, 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 3, which was certified by Great-West Trust Company, LLC, the trustee and custodian of the Plan, except for comparing the information with the related information included in the financial statements. We have been informed by the plan administrator that the trustee and custodian holds the Plan's investment assets and executes investment transactions. The plan administrator has obtained a certification from the trustee and custodian as of and for the years ended December 31, 2019 and 2018 that the information provided to the plan administrator by the trustee and custodian is complete and accurate.

Disclaimer of Opinion

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

Other Matter

The schedule H, line 4i - schedule of assets (held at end of year) as of December 31, 2019 is required by the Department of Labor's ("DOL") Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 and is presented for the purpose of additional analysis and is 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 schedule 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 financial statements and supplemental schedule, other than that derived from the information certified by the trustee and custodian, 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 7, 2020

Financial Statements

Ferro Corporation 401(k) Plan

Statements of Net Assets Available for Benefits

<i>December 31,</i>	2019	2018
Assets		
Investments, at fair value:		
Mutual Funds	\$ 114,459,124	\$ 106,280,569
Common/Collective Trusts	49,346,499	53,342,752
Ferro Corporation Stock	1,036,104	1,336,251
	164,841,727	160,959,572
Investments, at contract value:		
Guaranteed Investment Contract	14,206,244	14,005,976
Receivables:		
Employer contributions	1,568,770	1,770,504
Participant contributions	129,131	35,854
Notes receivable from participants	1,396,553	1,866,256
	3,094,454	3,672,614
Net Assets Available for Benefits	\$ 182,142,425	\$ 178,638,162

See accompanying notes to financial statements.

Ferro Corporation 401(k) Plan

Statements of Changes in Net Assets Available for Benefits

<i>For the Years Ended December 31,</i>	2019	2018
Additions to Net Assets Attribution to:		
Investment income (loss)		
Dividends and interest	\$ 4,638,523	\$ 5,547,202
Net appreciation (depreciation) in fair value of investments	31,216,467	(15,223,583)
Total investment income (loss)	35,854,990	(9,676,381)
Interest income on notes receivable from participants	70,690	78,262
Contributions		
Employer	3,462,708	3,731,472
Participants	4,683,351	4,981,178
Rollover	919,896	457,808
Total contributions	9,065,955	9,170,458
Total additions	44,991,635	(427,661)
Deductions from Net Assets Attributed to:		
Distributions to participants	41,338,362	23,609,089
Administrative fees	149,010	236,367
Total deductions	41,487,372	23,845,456
Net increase (decrease)	3,504,263	(24,273,117)
Net assets available for benefits:		
Beginning of year	178,638,162	202,911,279
End of year	\$ 182,142,425	\$ 178,638,162

See accompanying notes to financial statements.

Ferro Corporation 401(k) Plan

Notes to Financial Statements

1. Description of the Plan

The following is a brief description of the Ferro Corporation 401(k) Plan (the “Plan”). Participants should refer to the Plan document for a more complete description of the Plan’s provisions.

General

The Plan is a defined contribution profit sharing employee stock ownership plan with a 401(k) feature covering all U.S. employees of Ferro Corporation (the “Company”) and its domestic subsidiaries. Employees classified as independent contractors or leased workers, employees covered under a collective bargaining agreement that does not expressly provide for participation in the Plan, or employees receiving disability benefits under a long-term disability plan maintained by the Company are not eligible to participate in the Plan. A non-resident alien who receives no income from sources within the United States and any person who is retained pursuant to a personal services contract that provides such person is not eligible for benefits are also ineligible to participate in the Plan.

Eligible employees begin participation in the Plan on the first administratively feasible payroll period after their employment commencement date.

The Plan complies with Section 401(a) of the Internal Revenue Code of 1986, as amended, as well as the Employee Retirement Income Security Act of 1974 (“ERISA”), as amended. The Plan meets the employee stock ownership plan (“ESOP”) requirements of IRS Section 4975(e)(7).

Contributions

An eligible employee’s pretax contributions to the Plan may not exceed certain Internal Revenue Service (“IRS”) maximum amounts. The maximum amount was \$19,000 in 2019 and \$18,500 in 2018. Subject to the limitations above, Plan participants may elect to make pre-tax contributions of 1% to 40% of eligible compensation.

Pretax contributions made to the Plan are matched by the Company at 100% of pretax contributions attributable to the first 2% of an employee’s eligible compensation, and at 50% of the pretax contributions in excess of the first 2% and up to the next 6% of an employee’s eligible compensation. Except for certain collective bargaining unit participants, matching employer contributions are discretionary.

The Plan also permits participants to make after-tax contributions, which when added to a participant’s pre-tax contributions cannot exceed 40% of eligible compensation. Plan participants who are age 50 and who have reached certain maximum pre-tax contributions levels may also make pre-tax catch-up contributions of \$6,000 and \$5,500 in 2019 and 2018, respectively. Neither after-tax contributions nor catch-up contributions are matched by employer contributions. The Plan also provides that participants may roll over all or part of a qualified total distribution from another tax-qualified plan, rollover contributions may consist of after-tax contributions but not Roth amounts.

In addition to matching contributions, the Company makes discretionary basic pension contributions for certain eligible employees. Such contributions are based on years of service at the end of the plan year as noted below:

Ferro Corporation 401(k) Plan

Notes to Financial Statements

<i>Years of Service</i>	Contribution Rate on Compensation Below Social Security Wage Base ("SSWB")	Contribution Rate on Compensation Above SSWB up to IRS Compensation Limit
0 - 5	2%	4%
6 - 10	3%	6%
11 or more	4%	8%

The basic pension contributions paid in 2020 and 2019 for the years ended December 31, 2019 and 2018 totaled \$1,507,733 and \$1,751,266, respectively. The Company also makes profit sharing contributions for certain collective bargaining unit participants who are not eligible for basic pension contributions and makes certain Company contributions for certain collective bargaining unit participants. The total profit sharing contributions and company contributions for the years ended December 31, 2019 and 2018 totaled \$101,504 and \$110,684, respectively.

Participant Accounts

Participants are immediately vested in that portion of their account equal to the value of the elective deferral contributions, collectively bargained company contributions, rollover amounts in such participant's account, and actual earnings thereon. Upon death, disability, or attainment of normal retirement age, as defined by the Plan, a participant shall have a vested interest of 100% in the current balance of the participant's individual account. Each participant's account is credited with their contributions, Company contributions, and actual earnings thereon. Participants direct their accounts into various investment options offered by the Plan. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Investment Funds

There are various funds, each with varying degrees of risk, offered under the Plan. The participants allocate contributions among the funds and, generally at their discretion, may change the allocation percentages at any time, with the exception that they may not invest in or transfer funds into Ferro Corporation stock. Funds already invested in Ferro Corporation stock may remain invested in such stock. All Ferro Corporation stock is held by individual participant accounts and is increased or decreased by distribution and investment income or loss the same as other investment options.

Notes Receivable from Participants

Loans are permitted to be made to active participants. The notes receivable documenting the loans are secured by the participant's vested interest in the Plan and must be for a minimum of \$1,000 up to the lesser of (a) one half of the participant's vested account balance (including Company contributions) or (b) 100% of the value of their pretax, after-tax, and rollover contribution accounts. Loans made to participants may not exceed \$50,000, reduced by the amount of the highest outstanding loan balance they have had during the preceding 12 months. Loans may be made for any reason while employed at Ferro. The employee can have a maximum of two loans outstanding at a time. The loan repayment period may not be less than one year and may not exceed five years unless the loan is used to purchase a participant's principal residence for which the period may not exceed 20 years, through payroll withholdings at fixed dollar levels. The interest rates are based on the prime rate in effect on the date of the loan origination and range from 4.75% - 5.50% and 3.25% - 8.25% on all notes receivable from participants as of December 31, 2019 and 2018.

Ferro Corporation 401(k) Plan

Notes to Financial Statements

Vesting

Company matching and basic pension contributions vest at a rate of 20% per year of service. Collectively bargained profit sharing contributions vest 0% in the first 2 years, but 100% after 2 years of service. Collectively bargained company contributions are 100% vested immediately.

Forfeitures

Forfeitures of the nonvested portion of the Company's matching contribution are recognized as a reduction of the Company's matching contributions or basic pension contributions. The total amount of forfeitures available to the Plan was \$260,936 and \$529,839 for the years ended December 31, 2019 and 2018, respectively. The amount of the aforementioned balance that was used to reduce employer contributions was \$216,097 and \$304,240 for the years ended December 31, 2019 and 2018, respectively.

Withdrawals During Employment

A participant may withdraw any part of their current balance of their after-tax contribution account and rollover account. Any such withdrawal shall be made first from a participant's after-tax contribution account. A participant who has attained age 59 ½ may withdraw any part of their vested account that results from elective deferral contributions or matching contributions at any time. A participant may withdraw any part of their vested account that results from elective deferral contributions in the event of financial hardship due to an immediate and heavy financial need (as defined). The Plan adopted an amendment to eliminate the need to suspend a participant's elective deferrals for six months, as a condition of obtaining a hardship distribution, in accordance with IRS Notice 2019-04 effective January 1, 2019.

Payment of Benefits

Upon termination of service, death, or disability, a participant (or beneficiary) could elect to receive their vested balance in a rollover, lump-sum distribution, or via required minimum distributions (as provided by the Plan). The portion of such Participant's individual account invested in the Ferro Corporation Stock shall be distributed at the election of the participant or beneficiary either in whole shares of common stock of the Company with any fractional shares distributed in cash, or in cash. If the participant's account is between \$1,000 and \$5,000, the Plan may make an automatic rollover of the participant's vested interest in his or her account to a qualified individual retirement account. If the participant's account balance is less than \$1,000, the Plan may make an automatic lump-sum distribution to the participant equal to the participant's vested interest in his or her account.

Administrative Fees

During 2019 and 2018, the Company paid certain administrative expenses of the Plan, which are excluded from these financial statements. Investment transfer fees, brokerage fees, transfer taxes, and other expenses incurred in connection with the sale, purchase, and management of the assets of the investment funds were paid by the Plan.

Ferro Corporation 401(k) Plan

Notes to Financial Statements

2. Summary of Significant Accounting Policies

Basis of Presentation

The financial statements of the Plan are prepared using the accrual basis of accounting and 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 reported amounts in the financial statements and the accompanying notes and supplemental schedule. Actual results could differ from those estimates.

Investment Valuation and Income Recognition

Investments held by the Plan are stated at fair value except for fully benefit-responsive investment contracts, which are stated at contract 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. 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 in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

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 measurement 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.

The Plan invests in a fully benefit-responsive guaranteed investment contract (“GIC”) with Principal Life Insurance Company (“Principal”) (the “Principal Contract”). Principal maintains a general account, which is credited with contributions and earnings on the underlying investments and charged for participant withdrawals and administrative expenses. Principal Contract investments are recorded at contract value. A 90-day notice is required in order for the Plan to liquidate (surrender) this investment (see Note 5).

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

The Plan holds shares of Ferro Corporation stock, which is an allowable party-in-interest transaction under ERISA.

Ferro Corporation 401(k) Plan

Notes to Financial Statements

Notes Receivable from Participants

Notes receivable from participants are recorded at their unpaid principal balance plus any accrued but unpaid interest. Interest income on notes receivable from participants is recorded when it is earned. Related fees are recorded as administrative expenses when they are incurred. No allowance for credit losses has been recorded as of December 31, 2019 or 2018. Delinquent notes receivable from participants are reclassified as distributions based upon the terms of the Plan document. During 2019 and 2018, deemed distributions were not material to the Plan.

Benefit Payment

Benefits are recorded when paid.

Risk 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 participants' account balances and the amounts reported in the statements of net assets available for benefits.

Evaluation of Subsequent Events

The Plan and Management have evaluated events and transactions that occurred between December 31, 2019 and October 7, 2020, which is the date that the financial statements were available to be issued. There were no subsequent events to be reported other than the update to the status of the partial plan termination disclosed in Note 6 and the following:

COVID-19

On January 30, 2020, the World Health Organization ("WHO") announced a global health emergency because of a new strain of coronavirus originating in Wuhan, China (the "COVID-19 Outbreak") and the risks to the international community as the virus spreads globally beyond its point of origin. In March 2020, the WHO classified the COVID-19 Outbreak as a pandemic, based on the rapid increase in exposure globally.

The full impact of the COVID-19 Outbreak continues to evolve as of the date of this report. This pandemic has adversely affected global economic activity and greatly contributed to significant volatility in financial markets. As a result, the Plan's investment portfolio, which includes the Company's common stock, has incurred a significant decline in fair value since December 31, 2019. However, because the values of the Plan's investments, including the Company's common stock, have and will fluctuate in response to changing market conditions, the amount of losses that will be recognized in subsequent periods, if any, cannot be determined. Similarly, any future required contributions and benefit limitations cannot be determined at this time.

Ferro Corporation 401(k) Plan

Notes to Financial Statements

Coronavirus Aid, Relief, and Economic Security Act

On March 27, 2020, President Trump signed into law the “Coronavirus Aid, Relief, and Economic Security (“CARES”) Act.” The CARES Act, among other things, includes several relief provisions available to tax-qualified retirement plans and their participants. Plan management has evaluated the relief provisions available to Plan participants under the CARES Act and intends to implement the following provisions:

- Allow special coronavirus distributions up to \$100,000
- Increase of the available loan amount to the lesser of \$100,000 or 100% of the participant’s vested account balance
- Extend the period for loan repayments, if applicable, up to one year
- Suspend required minimum distributions for 2020

The Plan adopted an amendment to comply with the distribution provisions of the CARES Act effective April 17, 2020 and amended its loan policy effective April 13, 2020 to comply with the loan provision of the CARES Act.

Although Plan management cannot estimate the length or gravity of the impact of the COVID-19 Outbreak at this time, if the pandemic continues, it may have an adverse effect on the Plan.

Recent Accounting Pronouncements

In August 2018, the Financial Accounting Standards Board (“FASB”) issued Accounting Standard Update (“ASU”) No. 2018-13, Fair Value Measurements Topic (820), Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement. ASU No. 2018-13 eliminates certain disclosures, including the disclosure related to transfers between Level 1 and 2 investments, the valuation policies for Level 3 measurements and, for nonpublic entities, the change in the Level 3 investments’ unrealized gains and losses included in earnings. This ASU also amends certain disclosures, including disclosing purchases, sales and transfers for Level 3 investments instead of the Level 3 roll-forward. This ASU requires that nonpublic entity’s disclose additional supporting information used to derive significant unobservable inputs for Level 3, such as the range and weighted average of the significant unobservable inputs. For certain unobservable inputs, an entity may disclose other quantitative information (such as the median or arithmetic average) instead of the weighted average if the entity determines that other quantitative information would be a more reasonable and rational method to reflect the distribution of unobservable inputs used to develop Level 3 fair value measurements. For investments in certain entities that calculated net asset value, or NAV, an entity is required to disclose the timing of liquidation of an investee’s assets and the date when restrictions from redemption might lapse only if the investee has communicated the timing to the reporting entity or announced the timing publicly. If the timing is unknown, the reporting entity shall disclose that fact. The amendments clarify that the measurement uncertainty disclosure is to communicate information about the uncertainty in measurement as of the reporting date. ASU No. 2018-13 is effective for periods beginning after December 15, 2019. Early adoption is permitted. Management is currently evaluating the impact of this ASU on the Plan’s financial statements.

Ferro Corporation 401(k) Plan

Notes to Financial Statements

3. Certified Information

The Plan administrator has elected for the years ended December 31, 2019 and 2018 the method of compliance permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. Accordingly, as permitted under such election, the plan administrator has obtained certifications from the trustee and custodian of the Plan that all of the information provided by them is complete and accurate. Information included in the accompanying financial statements as to investments, notes receivable from participants, the net appreciation (depreciation) in the value of investments, interest and dividends is presented in reliance solely upon those certifications.

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 participants 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:

Mutual funds and Ferro Corporation stock: Valued at the daily closing prices as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily net asset value ("NAV") and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

Common/collective trusts: Valued at the NAV of units of a bank collective trust. The NAV, as provided by the trustee, is used as a practical expedient to estimate fair value. The NAV is based on the fair value of the underlying investments held by the fund less its liabilities. This practical expedient is not used when it is deemed probable that the fund will sell the investment for an amount different than the reported NAV. There are no unfunded commitments or significant restrictions on redemptions relating to these investments. Participant transactions (purchases and sales) may occur daily. Were the Plan to initiate a full redemption of the collective trust, the investment advisor reserves the right to temporarily delay withdrawal from the trust in order to ensure that securities liquidations will be carried out in an orderly business manner.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other 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.

Ferro Corporation 401(k) Plan

Notes to Financial Statements

The following tables set forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2019 and 2018:

	Level 1	Level 2	Level 3	Total
Mutual funds	\$ 114,459,124	\$ -	\$ -	\$ 114,459,124
Ferro Corporation stock	1,036,104	-	-	1,036,104
Common/collective trusts*				49,346,499
Balance, December 31, 2019	\$ 115,495,228	\$ -	\$ -	\$ 164,841,727

	Level 1	Level 2	Level 3	Total
Mutual funds	\$ 106,280,569	\$ -	\$ -	\$ 106,280,569
Ferro Corporation stock	1,336,251	-	-	1,336,251
Common/collective trusts*				53,342,752
Balance, December 31, 2018	\$ 107,616,820	\$ -	\$ -	\$ 160,959,572

*In accordance with ASC 820-10, certain investments that were measured at NAV (or its equivalent) as a practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in the tables above for the investments in common/collective trusts are intended to permit reconciliation of the fair value hierarchy to the line items presented in the statements of net assets available for benefits.

5. Guaranteed Investment Contract

The Principal Contract is included in the financial statements at contract value as reported to the Plan by the Trustee. Contract value represents contributions made to the contract, plus earnings, less participant withdrawals and administrative expenses. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value. The guaranteed investment contract issuer is contractually obligated to repay the principal and interest based on a specified interest rate that is guaranteed to the Plan. As described in Note 2, because the guaranteed investment contract is fully benefit-responsive, contract value is the relevant measurement attribute for the guaranteed investment contract. The Principal Contract's total gains, including interest credited, are reported within the "interest and dividends" line item in the statements of changes in net assets available for benefits.

There are no reserves against contract value for credit risk of the contract issuer or otherwise. The crediting interest rate is based on a formula agreed upon with the issuer, but it may not be less than 0.0 percent. Such interest rates are reviewed on a quarterly basis for resetting.

Certain events limit the ability of the Plan to transact at contract value with the issuer. Such events include the following: (1) amendments to the Plan documents (including complete or partial Plan termination or merger with another plan), (2) changes to the Plan's prohibition on competing investment options or deletion of equity wash provisions, (3) bankruptcy of the Plan Sponsor or other Plan Sponsor events (for example, divestitures or spin-offs of a subsidiary), either of which cause a significant withdrawal from the Plan, or (4) the failure of the trust to qualify for exemption from federal income taxes or any required prohibited transaction exemption under ERISA. The Plan administrator does not believe that any events which would limit the Plan's ability to transact at contract value with participants are probable of occurring.

Ferro Corporation 401(k) Plan

Notes to Financial Statements

The Principal Contract does not permit Principal to terminate the agreement prior to the scheduled maturity date.

The table below sets forth the average yield earned by the Plan for the Principal Contract:

Average yields:	December 31,	
	2019	2018
Based on the interest rate credited to participants	1.43%	1.43%

6. Partial Plan Termination

In January 2019, the Plan Sponsor announced the reorganization to its global operations and the closing of certain facilities in the United States, resulting in a partial plan termination as defined by ERISA. Under ERISA, a partial plan termination may occur if a significant percentage of the Plan participants are terminated because of an action taken by the Plan Sponsor. If a partial plan termination occurs, full vesting in the employer contributions is required for the affected participants who leave the Plan during the measurement period of the event causing the partial plan termination. In this case, the measurement period began January 2019, and any affected participants who have terminated employment during the measurement period have become fully vested in their account balances. In December 2019, the Plan Sponsor extended the measurement period to include the 2020 Plan year. Remaining participant vesting continues to be determined per plan provisions.

7. Plan Termination

Although the Company has not expressed any intent to terminate the Plan agreement, it may do so at any time. In the event of such termination, each participant will receive 100% of their account balance.

8. Federal Income Taxes

The Plan obtained its latest determination letter on September 27, 2016, in which the Internal Revenue Service stated that the Plan, as then designed, was in compliance with the applicable requirements of the Internal Revenue code. The Plan administrator and the Plan's tax counsel believe that the Plan is currently designed and being operated in compliance with the applicable requirements of the Internal Revenue Code. Therefore, no provision for income taxes has been included in the Plan's financial statements.

Accounting principles generally accepted in the United States of America require plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the tax authorities. The plan administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2019 and 2018, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress.

Ferro Corporation 401(k) Plan

Notes to Financial Statements

9. Party in Interest

Certain Plan investments are investment funds managed by the Trustee and Custodian. Purchases and sales of investment units of such funds qualify as party-in-interest transactions, as defined by ERISA. Loans to participants and shares of Ferro Corporation stock are also considered party-in-interest transactions as such participants are employed by the Plan Sponsor and the stock is the Plan Sponsor's. These party-in-interest transactions are exempt from the prohibited rules under ERISA.

10. Reconciliation of Financial Statements to Form 5500

For the years ended December 31, 2019 and 2018, the financial statements and the Form 5500 report the value of the Plan's stable value fund at fair value and current value, respectively.

The following is a reconciliation of net assets available for benefits per the financial statements to the Form 5500:

<i>December 31,</i>	2019	2018
Net assets available for benefits per the financial statements	\$ 182,142,425	\$ 178,638,162
Adjustment from fair value to current value for stable value fund	(44,681)	-
Net assets available for benefits per Form 5500	\$ 182,097,744	\$ 178,638,162

The following is a reconciliation of increase (decrease) per the financial statements to the Form 5500 for the years ended:

<i>December 31,</i>	2019	2018
Net increase (decrease) per the financial statements	\$ 3,504,263	\$ (24,273,117)
Change in adjustment between fair value and current value for stable value fund	(44,681)	258,985
Net income (loss) per Form 5500	\$ 3,459,582	\$ (24,014,132)

Supplemental Schedule

Ferro Corporation 401(k) Plan
EIN# 34-0217820
Plan Number 031

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

December 31, 2019

(a)	(b)	(c)	(d)	(e)
Identity of issuer, borrower, lessor, or similar party	Description of investment including maturity date, rate of interest, collateral, par or maturity value	Cost	Current value at December 31, 2019	
Registered Investment Companies				
Vanguard Group	Vanguard Target Retirement Fund 2025	**	\$	18,621,420
J.P.Morgan Asset Management	JPMorgan Small Cap Equity Fund	**		14,462,078
Vanguard Group	Vanguard Target Retirement Fund 2030	**		13,765,177
Capital Group	American Funds Europacific	**		11,538,116
J.P.Morgan Asset Management	JPMorgan Large Cap Growth	**		10,038,878
Vanguard Group	Vanguard Target Retirement Fund 2035	**		9,204,864
Western Asset	Western Asset Core Plus Bond	**		7,885,126
Vanguard Group	Vanguard Target Retirement Fund 2040	**		6,181,153
Capital Group	American Funds Washington Mutual	**		6,103,646
Vanguard Group	Vanguard Target Retirement Fund 2020	**		6,074,922
Vanguard Group	Vanguard Target Retirement Fund 2050	**		2,996,770
Vanguard Group	Vanguard Target Retirement Income Fund	**		2,489,384
Vanguard Group	Vanguard Target Retirement Fund 2045	**		2,415,367
Vanguard Group	Vanguard Target Retirement Fund 2015	**		1,568,088
Vanguard Group	Vanguard Target Retirement Fund 2055	**		765,654
Vanguard Group	Vanguard Target Retirement Fund 2060	**		348,481
Total Registered Investment Companies				114,459,124
Company Stock				
* Ferro Corporation	Ferro Corporation Stock	**		1,036,104
Common/Collective Trusts				
BlackRock Institutional Trust Company, N.A.	Blackrock Equity Index-Q	**		32,587,874
BlackRock Institutional Trust Company, N.A.	Blackrock Extended Equity Market (MT)	**		14,871,186
* Putnam Fiduciary Trust Company	Putnam Stable Value Fund	**		1,887,439
Total Common/Collective Trusts				49,346,499
Insurance Company General				
* Principal Life Insurance Company	Guaranteed Investment Contract	**		14,206,244
* Participant loans	Participant loans outstanding, various interest rates ranging from 4.75% to 5.50%	-0-		1,396,553
				\$ 180,444,524

* Represents a party-in-interest

** The cost of participant - directed investments is not required to be disclosed.

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

Plan Name: Ferro Corporation 401(k) Plan

Plan Number: 150028-01 EIN: 34-0217820 PN: 031

For Period Ending: 12/31/2019

(A) Party In Interest *	(B) Identity of Party	(C) Description of Asset	(D) Cost **	(E) Current Value
*	VARIOUS	PARTICIPANT LOANS -- INTEREST RATE (Low 3.25 High 9.50)	N/A	1,396,552.75
	BlackRock	BLACKROCK EQUITY INDEX Q	N/A	32,587,873.87
	BlackRock	BLACKROCK EXTENDED EQUITY K	N/A	14,871,186.08
*	Putnam	PUTNAM STABLE VALUE	N/A	1,842,758.31
	Vanguard	VANGUARD TARGET RETIREMENT INCOME INV	N/A	2,489,383.67
	Vanguard	VANGUARD TARGET RETIREMENT 2015 INV	N/A	1,568,087.80
	Vanguard	VANGUARD TARGET RETIREMENT 2020 INV	N/A	6,074,921.64
	Vanguard	VANGUARD TARGET RETIREMENT 2025 INV	N/A	18,621,419.68
	Vanguard	VANGUARD TARGET RETIREMENT 2030 INV	N/A	13,765,177.39
	Vanguard	VANGUARD TARGET RETIREMENT 2035 INV	N/A	9,204,863.86
	Vanguard	VANGUARD TARGET RETIREMENT 2040 INV	N/A	6,181,152.84
	Vanguard	VANGUARD TARGET RETIREMENT 2045 INV	N/A	2,415,367.13
	Vanguard	VANGUARD TARGET RETIREMENT 2050 INV	N/A	2,996,770.12
	Vanguard	VANGUARD TARGET RETIREMENT 2055 INV	N/A	765,654.29
	Vanguard	VANGUARD TARGET RETIREMENT 2060 INV	N/A	348,481.01
	American Funds	AMERICAN FUNDS EUROPACIFIC GR R6	N/A	11,538,115.62
	JP Morgan	JPMORGAN SMALL CAP EQUITY R5	N/A	14,462,078.25
	American Funds	AMERICAN FUNDS WASHINGTON MUTUAL R6	N/A	6,103,645.91
	JP Morgan	JPMORGAN LARGE CAP GROWTH R6	N/A	10,038,878.46
	Western	WESTERN ASSET CORE PLUS BOND IS	N/A	7,885,126.11
*	Ferro	FERRO CORPORATION STOCK	N/A	1,036,103.97
	Principal	PRINCIPAL LIFE INSURANCE	N/A	14,206,244.00
Total			0.00	180,399,842.76