Schlosser Forge Company dba Arconic

390 Park Ave., New York, NY 10022

Matt Riehl, Director of Government Affairs and Business Development
Aerospace Manufacturing

Business Type: Expansion County: Washoe County Development Authority Representative: Cynthia Egan - EDAWN

APPLICATION HIGHLIGHTS

- Schlosser Forge Company dba Arconic (Arconic) is currently reviewing the possibility expanding its Verdi, NV operations by developing a world class leading heat treatment and machining facility.
- Phase one will comprise the construction of a 12,500-square-foot heat treatment building with groundbreaking anticipated in October 2018.
- Phases two four will begin in 2019 with completion no later than 2022. These phases will include additional investment and workforce growth.

PROFILE

Arconic develops and manufactures high-performance, engineered products and solutions for the aerospace, industrial gas turbine, commercial transportation, defense and oil and gas markets. The company is headquartered in New York and has 157 locations in 25 countries. Arconic's Verdi, NV facility has been in operation since 1967 and manufactures large seamless rolled rings for the aerospace gas turbine industry. Materials processed include a variety of titanium, steel, and nickel based superalloys and size range spans from 36" to 150" diameter. The company's parts are used on a variety of commercial and military aircrafts. Arconic Verdi currently produces rings for all of the major aerospace engine manufacturers and participates on most of the new commercial and military programs. This ensures Arconic Verdi will continue to be a significant player in its field for decades to come. Arconic's Verdi site is well situated for future expansion activities with over 10 acres of undeveloped land and a vibrant workforce. The company's major competition resides in Europe, Mexico and Asia. By continued modernization, refinement of processes and cost controls, the Verdi facility will strengthen its foothold in the U.S. aerospace industry, capture off-shore revenue and continue to have a major economic impact on the Reno area economy. Source: Schlosser Forge Company dba Arconic

SIGNIFICANCE OF ABATEMENTS IN THE COMPANY'S DECISION TO RELOCATE/EXPAND

The Nevada expansion is dependent on numerous factors, and the availability of incentives is a critical component of the decision-making process. The company is requesting the benefits available under the Sales and Use Tax Abatement, Modified Business Tax Abatement and Personal Property Tax Abatement program. Without the abatement program, it is likely that the project would be located in southern California close to other existing facilities. Source: Schlosser Forge Company dba Arconic

REQUIREMENTS	Statutory Application		<u>Sufficient</u>	<u>% Over / Under</u>	
Job Creation	25	15	Company mosts	-40%	
Average Wage	\$22.54	\$26.57	Company meets	18%	
Equipment Capex (SU & MBT)	\$1,740,645	\$13,000,000	abatement eligibility requirements	647%	
Equipment Capex (PP)	\$1,740,645	\$13,000,000	requirements	647%	
INCENTIVES	Requested Terms	Estimated \$ Amount			
Sales Tax Abmt.	2% for 2 years	\$814,450			
Modified Business Tax Abmt.	50% for 4 years	\$28,705			
Personal Property Tax Abmt.	50% for 10 years	\$477,758			
Total		\$1,320,913			
NEVADA BUSINESS LICENSE					
	Current	□ Pending	Will comply before receiving		
			incentives		
OB CREATION	Contracted	24-Month Projection	5-Year Projection		
	25	15	55		
OTHER CAPITAL INVESTMENT	<u>Land</u>	Building Purchase	BTS / Building Improvements		
	\$0	\$0	\$7,000,000		
ECONOMIC IMPACT ESTIMATES (10-Year Cumulative)		<u>Total</u>	Construction		
Total Jobs Supported		95	75		
Total Payroll Supported		\$43,018,073	\$3,459,648		
Total Output Estimate		\$126,858,725	\$11,167,560		
Estimate includes jobs, payroll & output by the	ne company assisted as well as	the secondary impacts to other le	ocal businesses.		

Latinate includes jobs, payroll &	output by the company	assisted as well as the second	ary impacts to other local businesses.

NEW TAX REVENUE ESTIMATES (10-Year Cumulative)	Direct	<u>Indirect</u>	<u>Total</u>
Local Taxes			
Property	\$1,225,111	\$1,113,771	\$2,338,882
Sales	\$285,058	\$695,966	\$981,024
Lodging	\$0	\$11,436	\$11,436
State Taxes			
Property	\$59,591	\$65,127	\$124,718
Sales	\$351,000	\$266,712	\$617,712
Modified Business	\$345,900	\$175,209	\$521,109
Lodging	<u>\$0</u>	<u>\$3,812</u>	<u>\$3,812</u>
Total	\$2,266,660	\$2,332,033	\$4,598,693

EMPLOYEE BENEFITS

- Percentage of health insurance covered by company: 92%.
- Health care package cost per employee \$6,135 annually with options for dependents.
- Overtime, PTO/Sick/Vacation, Merit Increases, Bonus, Tuition Assistance, Relirement Plan/Profit Sharing 1401(k).

NOTES

- Percentage of market outside of Nevada: 100%.
- The company is also considering California as a potential location.

Date: September 20, 2018 Main Location: Carson City



August 9, 2018

Paul Anderson Executive Director Nevada Governor's Office of Economic Development 555 E. Washington Ave., Ste 5400 Las Vegas, NV 89101

Dear Mr. Anderson,

Schlosser Forge Company, which operates in Washoe County as Arconic, is a manufacturer of high performance engineered products. They have 157 locations worldwide and their Verdi facility has been in operation for 52 years. Their expansion strategy includes significant growth at the Reno location to meet increased demand for their products which serve the aerospace, defense, automotive, industrial gas turbine and commercial transportation industries.

They are requesting a Sales and Use Tax Abatement, Modified Business Tax Abatement and Personal Property Tax abatement and qualify on 2 out of 3 of the criteria. The opportunities associated with this expansion include a capital investment of \$13 million and \$7 million for building expansion for a total of \$20 million as well as the creation of 15 new jobs with an average hourly wage of \$26.57 and a full complement of health insurance plus benefit package. This is the 1st of 4 potential phases of expansion for Arconic which will take their current employee count from 160 full time workers to a total of 50 full time employees within 5 years.

While they are exploring options in California, Reno is well situated for an expansion with their facility residing on over 10 acres in Verdi. This overhaul and modernization effort will help to increase their manufacturing capacity and strengthen their position in the U.S. aerospace industry.

This application has the full support of EDAWN. The availability of incentives is a crucial element toward supporting their advantageous position during this period of unprecedented global demand for their products. We look forward to advancing the growth of the aerospace sector in the region and to supporting the attraction and growth opportunities in the industry.

Sincerely,

Mike Kazmierski

President/CEO



Matthew T. Riehl

Director, Government Affairs & Business Development

Matthew.Riehl@arconic.com

+1 216 641 4203 Office

+1 330 212 5367 Mobile

1616 Harvard Avenue Cleveland, OH 44105 USA

August 9, 2018

Mr. Paul Anderson Executive Director Nevada Governor's Office of Economic Development 555 East Washington Ave., Suite 5400 Las Vegas, NV 89101

Dear Director Anderson:

Arconic develops and manufactures high performance, engineered products and solutions for the aerospace, industrial gas turbine, commercial transportation, defense, and oil and gas markets. Arconic offers unique, comprehensive capabilities, from advanced alloy and 3D printing powder development to advanced manufacturing and qualification expertise. Arconic is a global company with 157 locations in 25 countries, and our corporate headquarters is located in New York. Our Verdi, NV facility, in operation since 1967, manufactures seamless rolled rings for the aero engine industry.

We are currently reviewing the possibility of developing a class leading heat treatment and machining facility. If the project moves forward, we will create 15 jobs with a proposed start date of hiring effective March 2019. Alternatives include expanding our operations in California and/or developing in Arizona. The Nevada expansion is dependent on numerous factors, and the availability of incentives is a critical component of the decision-making process. We are requesting the benefits available under the Sales and Use Tax Abatement, a Modified Business Tax Abatement and a Personal Property Tax Abatement programs.

The proposed expansion plan for Verdi includes an investment of \$7 million for building expansion, upgrades and general site infrastructure modifications. Coupled with an investment in new equipment and strategically modernizing existing equipment totaling \$13 million, for a total of \$20 million. In addition, the plan calls for the addition of 15 employees to staff and operate the new operations. The average hourly rate of the new employees is projected to be \$26.57. We also provide a comprehensive benefit plan to our employees and offer a 401(k) plan, dental and vision plans, and paid time off.

This project is a strategic expansion of the existing facility in Verdi and we are excited about the opportunities presented by this expansion. We appreciate your consideration of our request and look forward to growing our presence in the region. The Arconic Engines facility in Verdi has been a strong employer for over 50 years and we are hopeful of being able to offer employment to an additional 15 Nevadans and we are looking forward to making a positive impact to the Western Nevada economy because of the project.

Matthew T. Riehl

Director, Government Affairs & Business Development



Matthew T. Riehl

Director, Government Affairs & Business Development

Matthew.Riehl@arconic.com

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1616 Harvard Avenue Cleveland, OH 44105 USA

August 9, 2018

Mr. Paul Anderson Executive Director Nevada Governor's Office of Economic Development 555 East Washington Ave., Suite 5400 Las Vegas, NV 89101

Dear Director Anderson:

RE:

APPLICATION FOR INCENTIVES – REQUEST FOR CONFIDENTIALITY OF RECORDS AND DOCUMENTS

Dear Director Anderson:

On August 9, 2018, Schlosser Forge Company dba Arconic submitted an application to you as the Executive Director of the State of Nevada Governor's Office of Economic Development ("GOED") requesting approval of economic incentives for the expansion operation in Washoe County, Nevada. The purpose of this letter is to request that any and all records and other documents in GOED's possession concerning initial contact with, research and planning for Schlosser Forge Company dba Arconic, including but not limited to certain information in that application, and if amended, all be kept confidential pursuant to Section 4 of Assembly Bill No. 17 (2015 Regular Session) as codified in NRS 231.069.

Please be advised that Schlosser Forge Company dba Arconic specifically deems the following information proprietary and confidential:

- 1) The detailed schedule of Employment List
- 2) The detailed schedule of Capital Equipment List

Thank you for your consideration. If you have any questions or require any further information, please do not hesitate to contact me.

Matthew T. Riehl

Director of Government Affairs & Business Development

Arconic

ECONOMIC DEVELOPMENT

REQUEST FOR CONFIDENTIALITY DETERMINATION

Pursuant to NRS 231.069, and upon the request of applicant Schlosser Forge Company dba Arconic, the Executive Director of the Office has determined the:

- (i) The detailed schedule of Capital Equipment List, 5(A)
- (ii) The detailed schedule of Employment List, 5(B)

are confidential proprietary information of the business, are not public records, and shall be redacted in its entirety from the copy of the application that is disclosed to the public.

Paul Anderson

Executive Director

Date

Nevada Governor's Office of ECONOMIC DEVELOPMENT Company is an / a: (check one) ☐ New location in Nevada **Incentive Application** Company Name: Schlosser Forge Company dba Arconic Expansion of a Nevada company Date of Application: July 25th 2018 Section I - Type of Incentives Please check all that the company is applying for on this application: Sales & Use Tax Abatement Sales & Use Tax Deferral Modified Business Tax Abatement ☐ Recycling Real Property Tax Abatement ☑ Personal Property Tax Abatement ☐ Other: **Section 2 - Corporate Information** COMPANY NAME (Legal name under which business will be transacted in Nevada) FEDERAL TAX ID# Schlosser Forge Company dba Arconic 95-2650556 CORPORATE ADDRESS CITY / TOWN STATE / PROVINCE ZIP New York 10022 390 Park Ave MAILING ADDRESS TO RECEIVE DOCUMENTS (If different from above) CITY / TOWN STATE / PROVINCE ZIP 1 Eric Circle Verdi Nevada 89439 TELEPHONE NUMBER WEBSITE 775-770-1413 www.arconic.com COMPANY CONTACT NAME COMPANY CONTACT TITLE Matt Riehl Director of Government Affairs and Business Development E-MAIL ADDRESS PREFERRED PHONE NUMBER Matthew.Riehl@arconic.com (330) 703-2451 Has your company ever applied and been approved for incentives available by the Governor's Office of Economic Development? ☐ Yes ✓ No If Yes, list the program awarded, date of approval, and status of the accounts (attach separate sheet if necessary): **Section 3 - Program Requirements** Please check two of the boxes below; the company must meet at least two of the three program requirements: 🗾 A capital investment of \$1,000,000 in eligible equipment in urban areas or \$250,000 in eligible equipment in rural areas are required. This criteria is businesses. In cases of expanding businesses, the capital investment must equal at least 20% of the value of the tangible property owned by the business. ☐ New businesses locating in urban areas require fifty (50) or more permanent, full-time employees on its payroll by the eighth calendar quarter quarter in which the abatement becomes effective. In rural areas, the requirement is ten (10) or more. For an expansion, the business must increase employees on its payroll by 10% more than its existing employees prior to expansion, or by 25 (urban) or 6 (rural) employees, whichever is In urban areas, the average hourly wage that will be paid by the business to its new employees is at least 100% of the average statewide hourly in rural areas, the average hourly wage will equal or exceed the lesser of the county-wide average hourly wage or statewide average hourly Note: Criteria is different depending on whether the business is in a county whose population is 100,000 or more or a city whose population is 60,000 or more (i.e., "urban" area), or if the business is in a county whose population is less than 100,000 or a city whose population is less than 60,000 (i.e., "rural" area). Section 4 - Nevada Facility

Type of Facility: Headquarters □ Service Provider □ Technology Distribution / Fulfillment □ Back Office Operations Manufacturing □ Research & Development / Intellectual Property □ Other: PERCENTAGE OF REVENUE GENERATED BY THE NEW JOBS EXPECTED DATE OF NEW / EXPANDED OPERATIONS (MONTH / YEAR) CONTAINED IN THIS APPLICATION FROM OUTSIDE NEVADA 100% Apr-2019 NAICS CODE / SIC INDUSTRY TYPE Manufacturing DESCRIPTION OF COMPANY'S NEVADA OPERATIONS Manufacturing of exotic alloy rings for the commercial and defense aerospace industry PROPOSED / ACTUAL NEVADA FACILITY ADDRESS CITY / TOWN COUNTY ZIP Verdi 89439 Washoe County WHAT OTHER STATES / REGIONS / CITIES ARE BEING CONSIDERED FOR YOUR COMPANY'S RELOCATION / EXPANSION / STARTUP? California

Section 5 - Complete Forms (see additional tabs at the bottom of this sheet for each form listed below)

Check the applicable box when form has been completed.

5 ((A)	✓	F	an	ini	nei	nt	List

5 (B) 🗵 Employment Schedule

5 (C) 🗵 Evaluation of Health Plan, with supporting documents to show the employer paid portion of plan meets the minimum of 65%.

New Operations / Start Up - Plans Over the Next <u>Ten Years</u>	Expansions - Plans Over the Next 10 Years	
Part 1. Are you currently/planning on	Part 1. Are you currently leasing space in Nevada?	No
leasing space in Nevada?	If No, skip to Part 2. If Yes, continue below:	
If No, skip to Part 2. If Yes, continue below:	What year(s)?	
What year(s)?	How much space (sq. ft.)?	
How much space (sq. ft.)?	Annual lease cost at current space:	
Annual lease cost of space:	Due to expansion, will you lease additional space?	
Do you plan on making building tenant improvements?	If No, skip to Part 3. If Yes, continue below:	
If No, skip to Part 2. If Yes *, continue below:	Expanding at the current facility or a new facility?	
When to make improvements (month, year)?	What year(s)?	
	How much expanded space (sq. ft.)?	
Part 2. Are you currently/planning on	Annual lease cost of expanded space:	
buying an owner occupied facility in Nevada?	Do you plan on making building tenant improvements?	
If No, skip to Part 3. If Yes *, continue below:	If No, skip to Part 3. If Yes *, continue below:	
Purchase date, if buying (month, year):	When to make improvements (month, year)?	
How much space (sq. ft.)?	_	
Do you plan on making building improvements?	Part 2. Are you currently operating at an	
If No, skip to Part 3. If Yes *, continue below:	owner occupied building in Nevada?	Yes
When to make improvements (month, year)?	If No, skip to Part 3. If Yes, continue below:	
	How much space (sq. ft.)?	138,000
Part 3. Are you currently/planning on	Current assessed value of real property?	\$3,046,128
building a build-to-suit facility in Nevada?	Due to expansion, will you be making building improvements?	No
If Yes*, continue below:	If No, skip to Part 3. If Yes *, continue below:	
When to break ground, if building (month, year)?	When to make improvements (month, year)?_	
Estimated completion date, if building (month, year):		
How much space (sq. ft.)?	Part 3. Do you plan on building or buying a new facility in Nevada?	Yes
	If Yes *, continue below:	100
	Purchase date, if buying (month, year):	
	When to break ground, if building (month, year)?	Oct-201
	Estimated completion date, if building (month, year):	Apr-201
	How much space (sq. ft.)?	100,000
		,
ease complete Section 7 - Capital Investment for New Operations / Startu	 * Please complete Section 7 - Capital Investment for Expan 	nsions below.

BRIEF DESCRIPTION OF CONSTRUCTION PROJECT AND ITS PROJECTED IMPACT ON THE LOCAL ECONOMY (Attach a separate sheet if necessary):

The project is separated into four separate phases to grow with the business needs and demands.

Phase 1 will be a 12,500 construction of a HT building and the relevant equipment to support the operations, anticipated ground break is October 2018 and we expect operations to commence in March-April 2019, during the first phase there will be 15 FTE positions with average salary per hour of \$26.57 Phases 2-4 will begin in 2019 with completion no later than 2022, bringing 35 further FTE positions with average salary per hour of \$26.57

Section 7 - Capital Investment (Fill in either New Operations/Startup or Expansion, not both.)					
New Operations / Start Up	Expansions				
How much capital investment is planned? (Breakout below):	How much capital investment is planned? (Breakout below):				
Building Purchase (if buying):	Building Purchase (if buying):				
Building Costs (if building / making improvements):	Building Costs (if building / making improvements):\$7M				
Land:	Land:				
Equipment Cost:	Equipment Cost: \$13M				
Total:	Total:\$20M				
	Is the equipment purchase for replacement				
	of existing equipment?No				
	Current assessed value of personal property in NV:				
	(Must attach the most recent assessment from the County Assessor's Office.)				
Section 8 - Employment (Fill in either New Operations/S	tartup or Expansion, not both.)				
New Operations / Start Up	Expansions				
How many full-time equivalent (FTE*) employees will be created by the	How many full-time equivalent (FTE*) employees will be created by the				
end of the first eighth quarter of new operations?:	end of the first eighth quarter of expanded operations?:15				
Average hourly wage of these <u>new</u> employees:	Average hourly wage of these <u>new</u> employees: \$26.57				
	How many FTE employees prior to expansion?:160				
	Average hourly wage of these existing employees: \$23.86				
	Total number of employees after expansion:175				
set forth in NAC 360.474.	k or more, is eligible for health care coverage, and whose position is a "primary job" as				
OTHER COMPENSATION (Check all that apply): Overtime Merit increases	Tuition assistance Bonus				
	Tuition assistance ☑ Bonus Retirement Plan / Profit Sharing / 401(k) ☐ Other:				
BRIEF DESCRIPTION OF ADDITIONAL COMPENSATION PROGRAMS AND ELIG					
BRIEF DESCRIFTION OF ADDITIONAL CONFERENCE FROM TROCKING AND LEIC	indicit i Negonienie (Allacii a separate sheet ii necessary).				
Section 9 - Employee Health Insurance Benefit Program					
Is health insurance for employees and an option for dependents offered?:	☑ Yes (copy of benefit plan must be attached) □ No				
Package includes (check all that apply):					
✓ Medical ✓ Vision ✓ Dental	✓ Other: See attached				
Qualified after (check one):	_				
☑ Upon employment ☐ Three months after hire date	Six months after hire date Other:				
Health Insurance Costs:	Percentage of health insurance coverage by (min 65%):				
Cost of health insurance for company (annual amount per employee):	\$6,135.00 Company: 92%				
Health Plan annual out-of-pocket maximum (individual):	\$ 3,000.00 Employee: 8%				

[SIGNATURE PAGE FOLLOWS]

Section 10 - Certification

I, the undersigned, hereby grant to the Governor's Office of Economic Development access to all pertinent and relevant records and documents of the aforementioned company. I understand this requirement is necessary to qualify and to monitor for compilance of all statutory and regulatory provisions pertaining to this application.

Being owner, member, partner, officer or employee with signatory authorization for the company, I do hereby declare that the facts herein stated are true and that all licensing and permitting requirements will be met prior to the commencement of operations. In addition, I and for the company's legal coursel have reviewed the terms of the GOED Tax Abatement and Incentives Agreement, the company recognizes this agreement is generally not subject to change, and any material revisions have been discussed with GOED in advance of board approval.

Mark Quattrin	Signature Signature
Name of person authorized for signature	Signatuline
Plant Manager Title	August 9, 2018 Date

Nevada Governor's Office of Economic Development

555 E. Washington Ave., Ste 5400 · Las Vegas, Nevada 89101 · 702.486.2700 · (Fax) 702.486.2701 · www.diversitynevada.com

Site Selection Factors

Company Name: Schlosser Forge Company dba Arconic		Arconic County: Washoe County	County: Washoe County		
Section I - Site Selection Ratings					
Directions: Please rate the select factors by importan Application.	ce to the	company's business (1 = very low; 5 = very high). Attach this form	to the Incentives		
Availability of qualified workforce:	2	Transportation infrastructure:	2		
Labor costs:	2	Transportation costs:	2		
Real estate availability:	4	State and local tax structure:	3		
Real estate costs:	2	State and local incentives:	5		
Utility infrastructure:	4	Business permitting & regulatory structure:	4		
Utility costs:	2	Access to higher education resources:	5		

Please summarize the importance of the abatement program to your decision (please include at least a paragraph summary):

Without the abatement program it is likely that the project would have been located in Southern California close to other existing facilities.

Equipment Schedule, Detailed

The Office has determined the detailed equipment schedule as described in this application constitutes confidential proprietary information of Schlosser Forge Company dba Arconic, and is not a public record.

Employment Schedule, Detailed

The Office has determined the detailed employment schedule as described in this application constitutes confidential proprietary information of Schlosser Forge Company dba Arconic, and is not a public record.

5(C) Evaluation of Health Plans Offered by Companies

Company Name: Schlosser Forge Company dba Arconic	County:	Wash	oe County
Total Number of Full-Time Employees:		15	
Average Hourly Wage per Employee Average Annual Wage per Employee (implied)		\$26.57 \$55,265.60	
Annual Cost of Health Insurance per Employee Percentage of Cost Covered by: Company Employee		\$6,135.00 92% 8%	
Health Plan Annual Out-of-Pocket Maximum		\$3,000	
Generalized Criteria for Essential Health Benefits (EHB)		10.1100.0	100001
[following requirements outlined in the Affordable Care Act and US			
Covered employee's premium not to exceed 9.5% of annual wage)	1.0%	MMQ
Annual Out-of-Pocket Maximum not to exceed \$7,150 (2017)		\$3,000	MMQ
Minimum according to alth heartifus accounted (Company offices DDC)	۸.		
Minimum essential health benefits covered (Company offers PPO).		
(A) Ambulatory patient services		2	
(B) Emergency services			
(C) Hospitalization		2	
(D) Maternity and newborn care			
(E) Mental health/substance use disorder/behavioral health trea	tment		
(F) Prescription drugs		☑	
(G) Rehabilitative and habilitative services and devices		$\overline{\mathcal{Q}}$	
(H) Laboratory services		v	
(I) Preventive and wellness services and chronic disease manage	gement	V	
(J) Pediatric services, including oral and vision care			
No Annual Limits on Essential Health Benefits		Ø	
I, the undersigned, hereby declare to the Governor's Office of Eco are true, and that I have attached sufficient plan information highliminimum threshold for the employe paid portion of the plan for GO Name of person authorized for signature	ighting where	our plan reflect	s meeting the 65%
Title Wille NAGER	Date	7-18	
TIMO	Date		

SECRETARY OF STATE



NEVADA STATE BUSINESS LICENSE

SCHLOSSER FORGE COMPANY
Nevada Business Identification # NV20131585826

Expiration Date: October 31, 2018

In accordance with Title 7 of Nevada Revised Statutes, pursuant to proper application duly filed and payment of appropriate prescribed fees, the above named is hereby granted a Nevada State Business License for business activities conducted within the State of Nevada.

Valid until the expiration date listed unless suspended, revoked or cancelled in accordance with the provisions in Nevada Revised Statutes. License is not transferable and is not in lieu of any local business license, permit or registration.

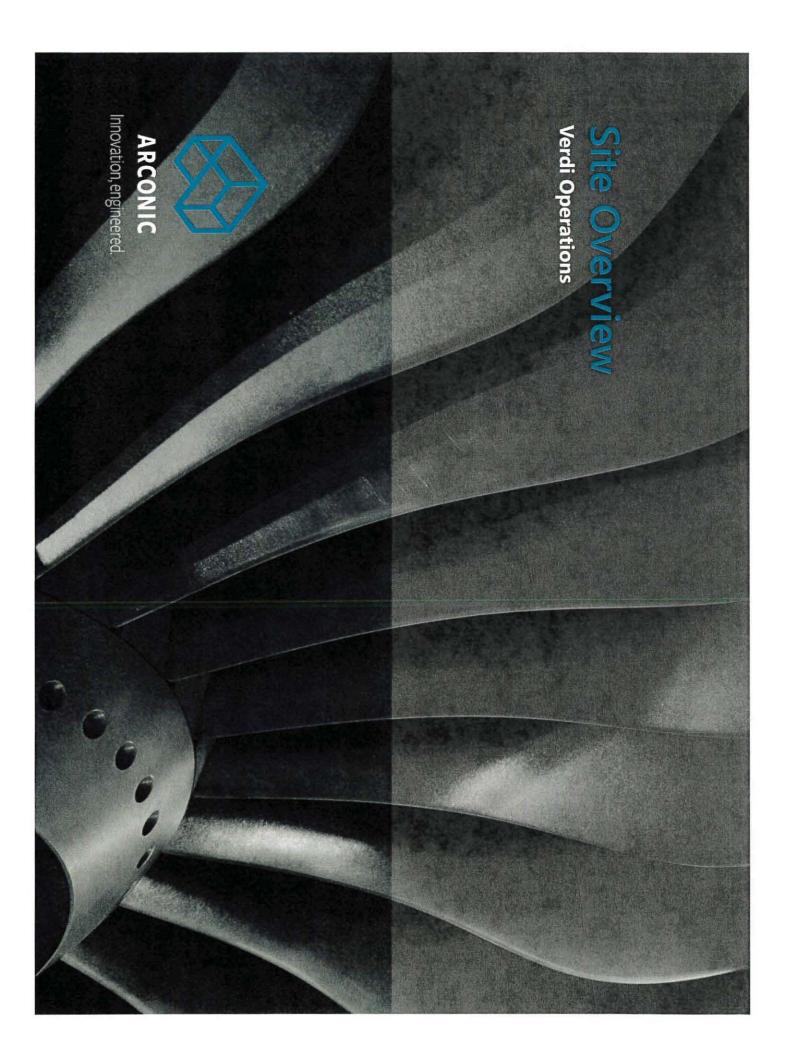


IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Great Seal of State, at my office on September 19, 2017

Barbara K. Cegavske Barbara K. Cegavske Secretary of State

You may verify this license at www.nvsos.gov under the Nevada Business Search.

License must be cancelled on or before its expiration date if business activity ceases. Failure to do so will result in late fees or penalties which by law <u>cannot</u> be waived.



Site Overview

Arconic Verdi manufactures large seamless rolled rings for the aerospace gas turbine industry. Our parts are used on a variety of commercial and military aircraft.

Materials processed include and variety of Titanium, Steel and Nickel Based superalloys

Size range spans from 36" to 150" diameter



Large nickel and titanium rings; specialises in large and critical containment cases Large contoured nickel based material, steel and Diverse Range of Contour and Rectilinear Rings titanium rings for aerospace and IGT Where Verdi fits in the Arconic Family... Medium to large rings with capabilities to support Project Dragon -Expansion speed and flexibility; aluminum centre of Small to medium rings in nickel, titanium and steel; world leader in aero-bearings excellence Aerospace and commercial rings for the Asian market Rancho Cucamonga, Ca Suzhou, China Rochester, Ny Fontana, Ca Verdi, Nv



160"

120"

100,

,09

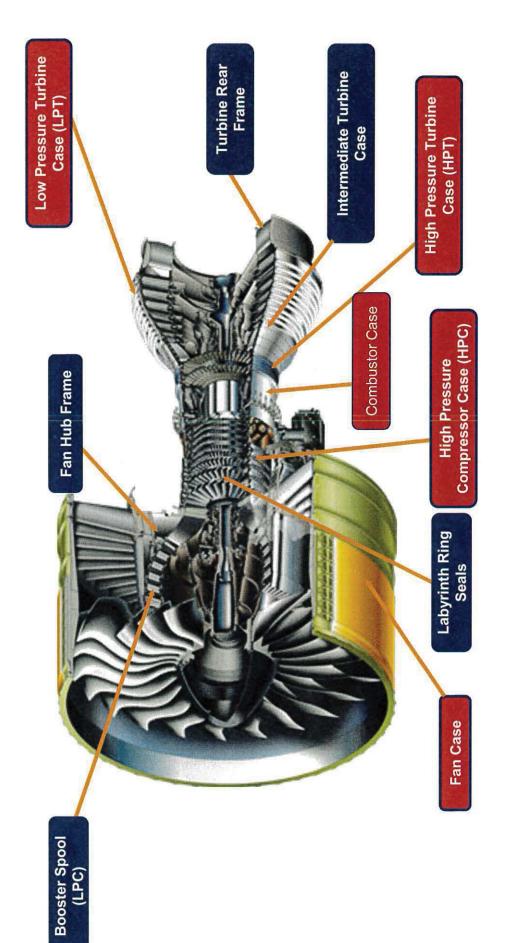
40"

30"

10"

Applications

Areas highlighted in RED represent Verdi Products

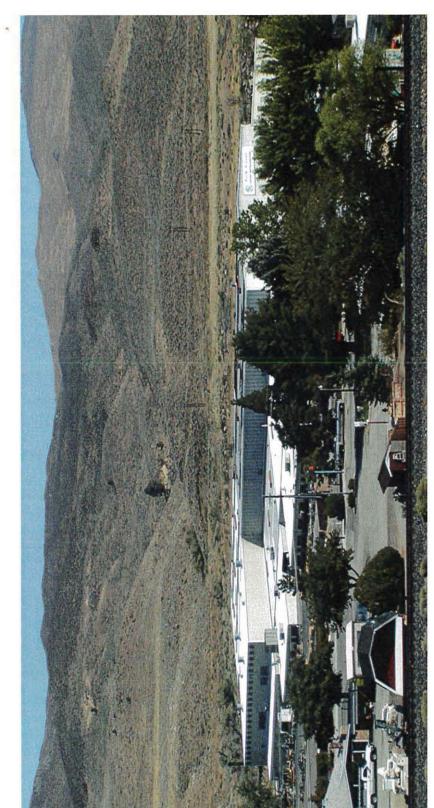




Site Overview

Location: Verdi, NV

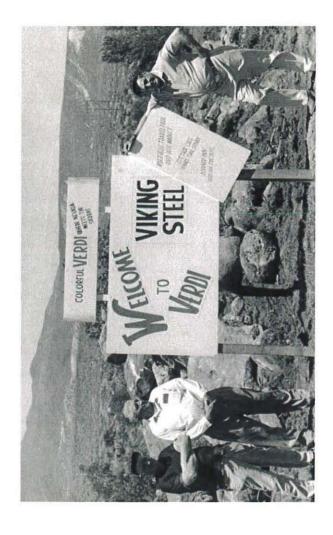
22 acre site - 138k ft² under roof





History

- In 1952, Viking Forge and Steel Company began as a two man forge shop in Albany, California forging gear blanks.
- In 1959 Viking acquired the Western Hemisphere's first German-made automated Wagner Ring Mill. This mill now retired still sits in the Verdi forge shop.
- superalloy materials. This gave Viking a technical advantage that resulted in a surge of orders far beyond the capacity of the Albany plant. In 1966 ground was broken for Viking Metallurgical Corporation's new plant in Verdi, Nevada to increase manufacturing capacity. In the early 1960s the Company began conducting high temperature metallurgical studies of Nevada was chosen because of its lower manufacturing costs.





History

- July, 1969 Viking was acquired by Air Reduction Company, Inc. or Airco as it was known. During Airco's ownership, with its greater resources, sales increased threefold.
- April, 1976 ownership of the Company changed again when Quanex, a steel tube manufacturer, set out to expand its product line into exotic metals. Quanex installed an Electron Beam Furnace for melting scrap titanium and nickel-based materials.
- In 1992 THT, Titanium Hearth Technologies (a joint venture between Axel Johnson and Timet) purchased the electron beam furnace operation. This operation peaked in 1997 producing 3,000 tons of titanium ingot and slab annually. The melting side operated independently from the forging operation until its closure in 1999 due to a slow down for Titanium from the aerospace and commercial (golf) sectors.
- Sheffield England based Firth Rixson purchased Viking Metallurgical in 1996.
- were installed. The addition of these machines greatly expanded both the size and complexity of 1997 was a year of major capital investments. Both the 3200 ton press and 400/200 axial ring mill parts produced in Verdi.
- November 2014-Firth Rixson is purchased by Alcoa. Verdi is integrated into Alcoa Fastening Systems and Rings
- November of 2016-Arconic splits from Alcoa



Verdi Capabilities – 3,200 Ton Press



Capabilities: Open di

Open die forging Saddling Upsetting Extruding Punching "Shingling"

Installed at Viking 1997

Mechanical components OEM: Loewy Hydropress

Hydraulics OEM: Wepuko Pahnke

Underwent major overhaul and base rebuild late 2013



Verdi Capabilities – 1,500 Ton Press



1500 ton Press

Installed at Viking 1960 (Albany, CA then

relocated to Verdi, NV)

OEM: HPM Corporation

Open die forging Axial flattening Capabilities:



Verdi Capabilities – Vertical Ring Mill



Installed at Viking 1992 OEM: Burns Machinery 300 ton radial rolling force VRM (Vertical Ring Mill)

Rings up to 60" O.D., 30" face height Straight wall ring rolling Capabilities:



Verdi Capabilities – 400/200 Ring Mill



Installed at Viking 1997

OEM: SMS-Meer

400 tons radial rolling force, 200 tons axial rolling force

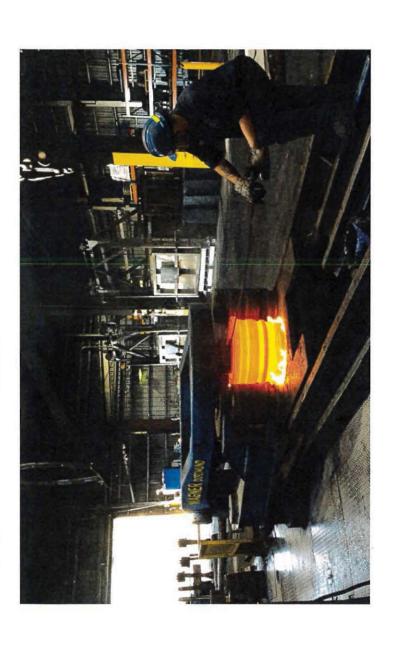
Capabilities:

Radial and axial ring rolling Straight wall and contoured ring rolling

Rings up to 173" OD, 35" height



Verdi Capabilities – 3000 Ring Mill



Installed at Viking 1965

OEM: Wagner-Dortmund (SMS-Meer)

230 tons radial rolling force

Capabilities:

Radial ring rolling

Straight wall and contoured ring rolling

Rings up to 118" OD, 19" height



Verdi Capabilities – Ring Sizers



Sizers

- 50" Sizer (380 Ton) 100" Sizer (1000 Ton) 150" Sizer (3000 Ton)
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Verdi Capabilities – Post Forge

Heat Treat

 High-Temp Solution Treat Furnace
 Age Furnaces
 Water Quench, Polymer Quench, Rapid Air Cool



Inspection

1 CMM 1 FARO Arm In house Lab (Spot Micrographs)



AFSR Verdi Process Overview

Inspection Destructive Testing Destructive Testing Non-Process Flow Machining Treatment Heat Forge Cutting Material Raw

Internal

External

External

External

External &

Internal

External

External

Internal

Internal



Arconic Verdi's future....

The Verdi site is well situated for future expansion activities with over 10 acres of undeveloped land and a vibrant workforce. Major expansion is underway. Heat Treat & Machining area expansion has begun or is planned for 2018. A major overhaul and modernization effort of the 400/200 Ring Mill work cell will complete in late 2018.

Arconic Verdi currently produces rings for all of the major aerospace engine manufacturers and participates on most of the new commercial and military programs. This ensures Arconic Verdi will continue to be a significant player in its field for decades to come.

Our major competition resides in Europe, Mexico and Asia. By continued modernization, refinement of processes and cost controls, the Verdi facility will strengthen its foothold in the U.S. Aerospace industry, capture off shore revenue and continue to have a major economic impact on the Reno area economy.

