

**ELLWOOD City Forge Group** is a leading supplier of remelted forged products in North America. Our high-quality steel, coupled with quick, reliable lead times, promotes ELLWOOD to a premier material source for steel service centers, forge shops, machine shops, and original equipment manufacturers.

With multiple open-die forging presses up to 5000 tons, ELLWOOD can manufacture a wide variety of configurations in single quantity or high volume.

We are a top producer of materials for the aerospace industry, including significant volumes supplied for landing gear and structural components.

Our flexibility is key! We can engineer the sizes and weights that you require. Our standard remelted inventory means that there is almost never a minimum order quantity.

## ***What is Remelting?***

Remelting is a secondary process to primary steelmaking. During Vacuum Arc Remelting (VAR) and Electro-Slag Remelting (ESR), steel is further refined, overall segregation and inclusions are reduced, and cleanliness levels are achieved to meet the very tight requirements inherent in critical aerospace specifications.

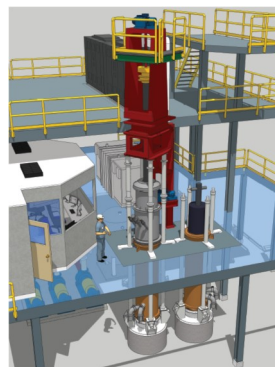
## ***Aerospace Commitment***

We are committed to the vital aerospace market, and have invested millions of dollars into a state-of-the-art remelt shop. The new shop contains 5 remelt furnaces—3 VAR and 2 ESR—with plenty of space for growth! Support equipment for grinding, annealing and saw cutting is also available.

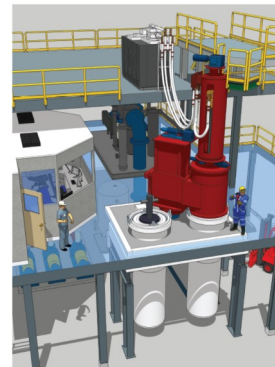
VAR electrodes in sizes from 20” through 42” diameter are remelted, allowing ELLWOOD to provide forgings in a multitude of forged dimensions.

## ***Unsurpassed Reliability***

ELLWOOD offers competitive lead times and reliable deliveries to customers in North America and around the world.



Electro-Slag Remelt



Vacuum Arc Remelt



**ELLWOOD**  
City Forge Group

**AEROSPACE  
CAPABILITIES**

***AS9100 Accredited***

# STEELMAKING

## Materials—Steelmaking

- ◆ Carbon
- ◆ Alloy
- ◆ Stainless
- ◆ Tool Steel
- ◆ Nickel Alloys



We offer a variety of materials melted in our modern steelmaking facilities and made to your unique specification. Our material is produced with tight chemistry control to provide heat-to-heat analysis consistency and unparalleled cleanliness.

ELLWOOD produces super clean materials using the Vacuum Arc Remelt (VAR) and Electro-Slag Remelt (ESR) processes when required by your specification. Call us today to see how we can provide a steelmaking solution for you!

# GRADES

## Typical Grades

Our in-house primary steelmaking and remelting allow us to make hundreds of standard grades, as well as customized chemistries to fit your every need!

STAINLESS & NICKEL ALLOYS			
304/304L/304LN	308/308L	309/309L	310/310H
316/316L/316LN	317/317H	321/321H	347/347H
348/348H	403	410/410S	416
420	431	F6NM	15-5
17-4	DUPLEX	FXM-19	
Alloy 600	Alloy 625	Alloy 800	Alloy 825

VAR & ESR			
4340	9310	300M	D6AC
4340M	4340V	15-5	

\*Additional grades per inquiry.

## Specifications

ELLWOOD produces material in accordance with a multitude of critical aerospace specifications including AMS, BMS and MTL. We commonly produce forgings to customer-specific requirements—we would be happy to review your unique specification!

# PRODUCTS

## Shapes & Sizes

ELLWOOD provides remelted products in a variety of different forms —

- Billet
- Preforms
- Bar
- Shafts
- Blocks
- Hollows
- Disks

Our multiple forging presses enable us to provide the shape and size that you require. Send us a drawing or your sizes today!

## Machining

Value-added machining is available for rough, semi-finished or finished machining. Our extensive machining capabilities include milling, conventional and CNC lathe turning, peeling, trepanning and boring.

