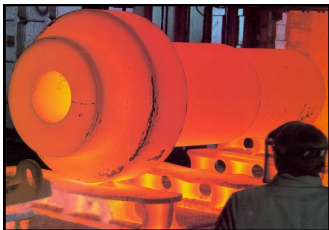


Known worldwide as a leader in the open die forging industry, ELLWOOD City Forge Group manufactures a wide range of medium and large sized forgings in carbon, alloy, stainless, tool steels, nickel alloys and aluminum. We specialize in producing custom forgings including shafts, blocks, bars, hollows, discs, eccentrics, and smooth forged billet in weights up to 70,000 pounds, lengths to 57 feet, and diameters to 135 inches.

With multiple open die forging presses up to 5000 tons, ECFG can manufacture a variety of dimensions in single quantity or high volumes. We are experts in providing products for critical applications such as blowout preventers, frac and mud pump blocks, and top drive components.

We are committed to providing efficient, innovative and cost-effective solutions for your individual needs, ***delivered on time.*** In doing this, we serve customers both large and small.



Spool Body—Wellhead



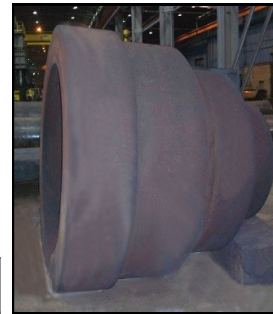
Top Drive Main Shaft

## ***Unsurpassed Reliability***

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



Annular Blowout Preventer



Fluid End Blocks—Frac



**ELLWOOD**  
City Forge Group

**OIL & GAS  
FORGINGS**

## MATERIALS

### Steel & Aluminum

- ♦ Carbon
- ♦ Alloy
- ♦ Stainless
- ♦ Tool Steel
- ♦ Nickel Alloys
- ♦ Aluminum



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.

We are excited to announce that Aluminum production begins fourth quarter of 2020!

Call us today to see how we can provide a material solution for you!

## PRODUCTS & QUALITY

### Oil & Gas Products

- ♦ Shafts
- ♦ Blocks
- ♦ Hubs
- ♦ Sleeves
- ♦ Discs
- ♦ Bars
- ♦ Billets



Peeled Bars

### Quality

Our experienced metallurgical engineers possess a vast understanding of the microstructure of heavy metallic sections over a large range of chemistries, sizes and geometries. Based on this knowledge, we provide the specialized mechanical properties that our customers require.

ELLWOOD produces material in accordance with a multitude of critical oil and gas specifications. We are AS9100 and PED certified, as well as Nadcap accredited for Materials Testing Laboratory (MTL).

### Membership



IADC  
MEMBER

## HEAT TREAT & MACHINING

### Heat Treat Facilities

ELLWOOD has state-of-the-art precision heat treating equipment necessary to deliver the demanding mechanical properties that our customers specify.

### Machining

If you require a rough machined, semi-finished or finished forging, ELLWOOD has extensive machining capabilities. Our machining equipment includes milling, conventional and CNC lathe turning, sophisticated machining centers, vertical turning, trepanning and boring.



Subsea Spool



Subsea Flexjoint



Finish Machined  
Subsea Flexjoint