

## **OVERVIEW**

**Patriot Forge Co.** is a Canadian company that specializes in the production of high quality custom open-die and rolled ring forgings.

Patriot is capable of processing a variety of material grades in weight ranges from 5 to 90,000 pounds. Through rigorous material testing and thorough quality programs we are able to ensure the strength, toughness, and structural soundness required for your critical service applications.

### **HISTORY**

- ▶ 1976 One facility serving primarily local customers
- ▶ 1984 Built Brantford, Ontario location
- ▶ 1992 Built Paris, Ontario location
- ▶ 2016 Large expansion of the Brantford location
- Today, Patriot Forge Co. is Canada's leading producer of custom open die forgings and rolled rings. We are a strategic industry partner with over 25 years' experience working with 0EMs in North America and abroad.

## **FORGING EQUIPMENT**

- ▶ 1000T, 1650T & 5000T Hydraulic Forging Presses
- ▶ 5000lb, 6000lb, & 8000lb Pneumatic Forging Hammers.
- Ring Roller
- 16 Forge Furnaces
- 9 Mobile Forging Manipulators, and
  1 Rail-Bound Manipulator
- 9 Cranes from 20T to 60T
- ▶ 60" Gantry Saw
- ▶ 8 Quench Tanks (Water + Polymer)

## **MACHINING EQUIPMENT**

- Over 20 band saws of various sizes
- 3 Plate saws
- 15 different mills with CNC and manual capabilities
- 20 lathes with both CNC and manual capabilities
- 3 large planer mills
- 3 deep hole trepanning lathes
- ▶ 1 Radial Drill



280 Henry Street Brantford, Ontario CA N3S 7R5 Toll Free: 1-877-495-9542

Tel: 519-758-8100

WWW.PATRIOTFORGE.COM

# SPECIFICATIONS AND MATERIALS

Patriot Forge Co. has a well-earned reputation for dedication to customers and production of the highest quality forgings. We endeavor to be a globally recognized leader in the supply of components for the most demanding uses. Let us help supply the forgings you need for your critical applications.

QUALITY
CERTIFICATIONS / APPROVALS
ISO 9001:2015 / AS9100D
PED 2014/68/EU
ABS CERTIFICATION
CONTROLLED GOODS PROGRAM
NUCLEAR CSA N299.3 and
ASME SECTION III NCA-3300

MATERIALS
300/400 SERIES STAINLESS
CARBON STEEL
ALLOY/LOW ALLOY
DUPLEX/SUPER DUPLEX
ASTM, ASME
ALUMINUM
NITRONICS, HIGH NICKEL etc.
OLID MATERIALS VISIT OLID WERSITE

## TYPICAL PRODUCTS/ DIMENSIONS

#### **BARS & SHAFTS**

60" diameter maximum 480" long maximum 90,000 lbs maximum

#### **SLEEVES**

60" 0.D maximum 40" I.D maximum 240" max length 50,000 lbs maximum

#### **OPEN DIE RINGS & DISCS**

100" 0.D maximum 90,000 lbs maximum

#### **DIE TOOLED FORGINGS**

90" O.D maximum

#### **SOUARES & RECTANGLES**

1800 square inches max cross section 90,000 lbs maximum

#### **ROLLED RINGS**

48" 0.D maximum 12" face length maximum 1,500 lbs maximum

FOR A FULL LIST OF OUR MATERIALS VISIT OUR WEBSITE <u>WWW.PATRIOTFORGE.COM</u>

## **VALUE ADDED SERVICES**

#### **HEAT TREATMENT**

- Anneal
- Normalize
- Ouench
- Temper
- Stress Relieve

## **INDUSTRIES SERVED**

- ▶ DEFENSE: US direct and through Canadian Controlled Goods Program
- POWER GENERATION: Fossil and nuclear; large scale generation
- OIL & GAS: Components associated with drilling, exploration and compression

#### **ADDITIONAL SERVICES**

Patriot Forge is also able to offer the following additional services:

- Rough & Finish Machining. Rough machining services for open die forged parts up to 80,000 lbs
- Destructive & Non-Destructive Testing
- Thermal Stability Testing
- ► INDUSTRIAL: Materials in a variety of heavy industries including steel mills, pulp & paper, mining
- AEROSPACE: Materials supplied to vendors for commercial aircraft
- ▶ INFRASTRUCTURE: Components used in bridges, locks & dams

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