



SOMERS FORGE LTD (UK)

Prospect Road, Halesowen, West Midlands B62 8DZ England

Phone: +44 0121 585 5959

Email: sales@somersforge.com

SOMERS STEEL (USA)

6221 Commerce Drive, Westland, Michigan, 48185-5678 USA

Phone: +1 734 729 3700 Fax: +1 734 729 4130

Toll-Free: +1 800 854 2927

Email: sales@somerssteel.com

www.somersforge.com



**A STRONG
FUTURE
TO BUILD
ON THE
GREATEST
HERITAGE**



**FORGING A
STRONGER FUTURE**



WELCOME TO SOMERS FORGE

ONE COMPLETE FORGING SOLUTION

ESTABLISHED IN 1866, SOMERS FORGE IS A WORLD LEADER IN OPEN DIE FORGING. WITH OVER 150 YEAR'S EXPERIENCE SOMERS FORGE HAS A RENOWNED INTERNATIONAL REPUTATION FOR SUCCESSFULLY COMBINING THE LATEST TECHNOLOGY WITH TRADITIONAL QUALITY SKILLS TO BE A WORLD FORCE IN ENGINEERING.

OVER 150 YEAR'S EXPERIENCE

Somers has a wealth of experience in the manufacture of high integrity parts, through the use of carbon steels, alloy steels, stainless steels, titanium and the more exotic grades such as nickel alloys, which are all trusted to deliver in the harshest of environments.

We are proud to serve many demanding markets globally, including the **Aerospace, Defence, Food Processing, Gear, General Engineering, Marine,**

Mining, Nuclear, Power Generation, Oil & Gas, Paper Machinery and Rail.

Offering an unprecedented range of products from specialised one off to high volume orders, we ensure every order is delivered right first time and on time.

Staying true to Somers roots we are based at the heart of the historic industrial Black Country conveniently located just outside of Birmingham.



OUR VISION

To set world class standards in forging and engineering whilst using an environmentally friendly process through investment in the latest technology for future generations.

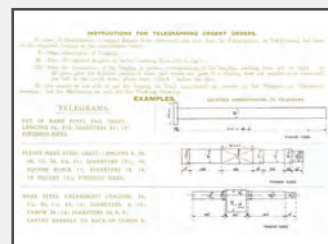


ENVIRONMENT

We are proud to say we manufacture in accordance with the International Environment Management System BS 14001:2015 and are a member of the Climate Change Levy.

With our most used raw material being steel, we ensure that it is 100% fully traceable and any metal by-product is recycled. We see it as our responsibility to reduce the impact the business has on the local environment and set a benchmark for others to follow. Constant investment and assessment enables Somers to reduce our energy usage and carbon emissions.

PROUD HISTORY



1697 We are proud to say we are part of the tenth oldest family run firm in the UK, with it all starting back in 1697 with the pioneering Joseph Folkes and the Lye Forge

1704 Manufactured body armour and swords for the Battle of Blenheim in 1704

1850 First steam hammer was introduced

1866 Somers Forge was founded

1881 Royal Warrant from Queen Victoria

1895 Our first hydraulic press was installed with a 600 tonne capacity

1897 Forged Iron Cathead for H.M.S Goliath

1905 Installed a 3,600 tonne steam hydraulic press

1906 Forged and machined four 20ft steel columns for the Bank Of England

1908 Somers swimming bath in the works ground was open to the public, pictured on gala day

1910 11 ton anchor supplied for R.M.S Aquitania, we also forged parts of the anchors on the Olympic-class ocean liners (Titanic, Olympic, Britannic)

1911 Instructions for telegraphing urgent orders in our old brochure

1912 Admiralty awarded for shafting

STILL FORGING AHEAD

1914 Throughout WW1 women played a huge role at Somers turning and boring shells for the war

1917 Princess Victoria Louise the sister to King George visited the works

1936 1,000 tonne hydraulic press was installed

1945 Heat Treatment and research Laboratory was introduced

1948 H.M. King George VI and Queen Elizabeth visit Somers at the British Industries Fair

1957 23rd April H.M Queen Elizabeth II and Prince Phillip opened Press 6, pictured here watching the forging

1960 Somers Steelstock was created to fill the need for quick deliveries

1981 Constantine Folkes became the youngest chairman of a public company in the UK at 28 years old. Now the chairman and chief executive of the Folkes Holding Company.

1983 Somers Steel USA established to serve the Americas closed forging steel needs

1986 Controller of the Navy, Vice Admiral Sir Derek Reffell pictured during a visit

1988 Thankyou letter from Ministry Of Defence for receiving our magnificent book

1994 Forged and machined one of the largest rock breaking chisels at 25 tonne which is still in service today

2015 We were part of the TransForge Project which examined the feasibility of fabricating and forging dissimilar weld joints for nuclear power plants to prevent the high failure rates

2018 Rebranded and invested £2 million to increase capacity and capabilities





FORGING

Somers Forge draws upon its decades of experience and merges this with industry innovation, through the use of the the very latest forging techniques.

The wide range of equipment that our facility offers enables us to produce open die forgings from as little as 1 kg to in excess of 80 tonnes in weight, with lengths going up to 23 metres.

Our forging furnaces are fully approved to the latest aerospace, nuclear and defence standards allowing us to manufacture customer products using a diverse range of high integrity materials.



**1 kg to
80 tonnes**

**Lengths up to
23 metres**

Through the open die forging process we can guarantee increased strength, the best microstructure, longer lifespan and less material waste providing our customers savings.

Our highly skilled team has a wealth of experience in forging titanium and super alloys, which is an excellent solution for aerospace applications, applying ultimate strength to a lightweight application within corrosive environments.



MATERIALS FORGED INCLUDE

- Carbon Steel
- Alloy Steel
- Stainless Steel
- Inconel
- Titanium
- Duplex
- Die Steel
- Copper
- Nickel Aluminium Bronze





HEAT TREATMENT

We use advanced heat treatment technology to refine the structure of materials to meet the requirements of a wide range of international standards.

All 24 furnaces are surveyed to meet national and international specifications, some of which are calibrated to **AMS-2750E**, **API6A** and **Aerospace Standards**.

To accommodate our steel forging capabilities, we are able to heat treat work pieces in excess of 23 metres in length.



**FORGINGS BUILT
TO WITHSTAND
THE HARSH
OF ENVIRONMENTS**



THE VARIOUS TREATMENTS AVAILABLE ARE

- Annealing
- Normalising
- Hydrogen Diffusion
- Water Quenching
- Oil Quenching
- Tempering
- Stress Relieving
- Post Weld Heat Treatment





MACHINING

Our state of the art new machining centre enables forgings to be supplied either pre-machined or completely finish machined ready for installation.

We can manufacture components in excess of 20 meters to the tightest of tolerances and turn up to 100 tonnes with 5 axis milling up to 80 tonnes. We are fully invested to propel the worlds fleets through the harshest of environments with our CNC lathes and unique boring facilities which enable us to bore a shaft with a length in excess of 20 meters.

EQUIPPED WITH

- Vertical Boring
- Horizontal Deep Hole Boring
- Honing
- Milling
- Turning
- Drilling Machines
- Balancing
- Sawing

In addition, we carry out a variety of specialised operations including bearing and bolt fitting, shrink fitting, re-fitting and weld repair work to meet specific customer requirements.



CAPACITY GUIDE



DEEP HOLE BORING

Length 20000 mm - DIA 625 mm

TURNING

Length 23000 mm - DIA x 1500 mm

MILLING

7000 mm MAX BED

3 AXIS CNC

X 2000 mm Y 1200 mm Z 800 mm

5 AXIS CNC

X 4500 mm Y 2500 mm Z 1250 mm

VERTICAL BORING

3000 mm DIA Table

HONING

15000 mm DEEP

SAW

1500mm DIA



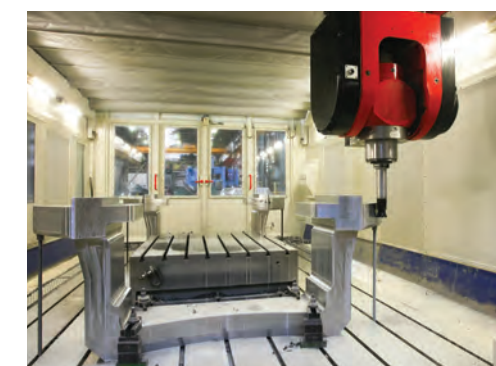
Machine up to **100 tonnes**

REFURBISHMENT OF PROPULSION SHAFTS

The Somers name has gained a first class reputation from many of the worlds Navies and commercial ship builders, as we are a preferred supplier to a number of OEM's. We specialise in the finish machining and refurbishment of ship propulsion shafts including the supply and fitting of reinforcing sleeves, bronze, stainless steel or nickel alloy liners and GRP coating.

BENEFITS

- Extended Life Span
- Cost Reduction
- Time saving





HIREWORK

INCREASED CAPACITY

HIREWORK FORGING

We offer ingot conversion, bar and individual product forgings from free issues materials. Avoiding capital investment whilst providing improved grain structure. Manufacturing forgings from 1 kg up to 80 tonnes with a max length of 23000 mm.

BENEFITS

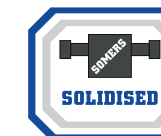
SPECIALIST EXPERTISE GREATER FLEXIBILITY QUICKER TURNAROUND NO CAPITAL INVESTMENT & MAINTENANCE COSTS

SUBCONTRACT MACHINING

Unique opportunity to use the rarest range of machining equipment, including the largest borer in Europe. For products supplied either pre-machined or completely finished machined.

SUBCONTRACT HEAT TREATMENT

Quality accredited heat treatment to AMS-2750E API6A standards, on components in a range of shapes, sizes and materials. From a small ring up to large shafts.



TEST LABORATORY

Somers is made complete with its in-house testing facilities carried out to British, European, ASTM standards and third-party inspection authorities. Offering non-destructive testing, hardness testing, mechanical testing and metallographic analysis.

We can facilitate a wide range of tests as required by our customer. In addition we test under different climatic conditions from sub-zero to elevated temperatures.



- Cleanliness / Inclusion Count
- Grain Sizing
- Photo-micrographs
- Simulated post weld heat treatment testing
- Ductile-brittle transition curves
- Magnetic Particle Inspection
- Ultrasonic Inspection
- Dye Penetrant Inspection
- Brinell Hardness
- Vickers Hardness
- Rockwell Hardness
- Room and Elevated Temperature Tensile
- Room and low temperature impacts

SOMERS STEEL STOCK

Somers expertise in the manufacture and supply of die blocks means we have a long established reputation within the marketplace and have developed a large number of long lasting customer relationships. We have two steel stockholding facilities: Somers Steel Stock in Halesowen and Somers Steel USA based in Michigan, USA. The extensive steel heat treatment and steel machining facilities at Somers Forge enable steel to be supplied to unrivalled sizes, in any condition, fully bespoke to our customers' requirements. We are proud to offer our steel with short lead times on our 'off the shelf' items and can provide delivery nationwide.



GENERAL ENGINEERING STEELS

BS - 070M20, 080A42, 070M55, 605M36, 655M13, 709M40, 722M24, 817M40, 826M40, 410S21, S355J2G3

DIN - C22, C40, C45, C60, 42CrMo4, 34CrNiMo6, 30CrNiMo8, 18CrNiMo7-6

AISI/SAE - 1020, 1025, 1040, 1045, 1055, 4140, 4340, 4130, 8620, F6NM, 410

Various Titanium Grades

Super Alloys

DIE STEELS

Electem No. 5 (DIN 1.2713), Somdie (DIN 1.2714)

Bestem, Thermodie

VMC (AISI H13)

Somtherm



QUALITY CONTROL

At Somers Forge quality management control is foremost in the minds of all its employees with our personal commitment to quality ensuring we continue to maintain our international reputation.

The true testament to our quality standard was being awarded the prestigious Admiralty approval in 1912 which we have held ever since.

Every order is processed strictly in accordance with the Somers quality assurance procedure which is approved by all leading third-party surveying authorities.

A high quality product demands the total commitment from a quality company and here at Somers Forge that is what we strive to provide for each and every customer.

ACCREDITATIONS

- AS9100D International Quality Management System
- BS EN ISO 9001:2015
- ISO 14001:2015
- Ministry of Defence
- Lloyds Register EMEA
- ABS
- DNV
- Cyber Essentials Scheme



SOME OF OUR CUSTOMER APPROVALS

- Rolls-Royce: Aerospace
- Rolls-Royce: Nuclear sector submarine
- Rolls-Royce: Naval Marine
- Airbus
- BAE
- Timet

**Manufactured with precision
AS9100D**

SOMERS OPTIMAL SERVICE

WHY USE S.O.S?

ALL INHOUSE FACILITIES TRUSTED FAMILY NAME OVER 150 YEARS OF EXPERIENCE

At Somers we know time is precious, that is why we offer an express service to make sure you stay on track. Whether you have an oil rig that requires urgent components or have been let down by another manufacturer, we can offer our unique S.O.S service to get you back on track.

The complete S.O.S express service includes a commitment to fast track manufacturing, testing and delivering next day with the same exceptional Somers Forge quality.

You will be assigned a project manager who will ensure that your drawing matches the desired outcome for use and they will keep you updated with the rapid turnaround. This unique service was developed to help each customer achieve their own tight deadlines.

With the Somers trusted name you can take concern out of the equation. Contact us today with 'S.O.S' as the subject to find out just how fast our Somers Optimal Service can be for you!



**With the Somers trusted name you can
take concern out of the equation**



PRODUCTS

OPEN DIE FORGINGS ALL INDUSTRIAL APPLICATION

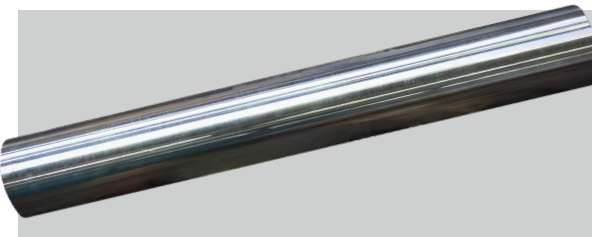
Please enquire today to fully understand our wide range of unmachined and finished machined products.

WE THRIVE ON MANUFACTURING COMPLEX SOLUTIONS

PRODUCTS INCLUDE BUT NOT LIMITED TO:

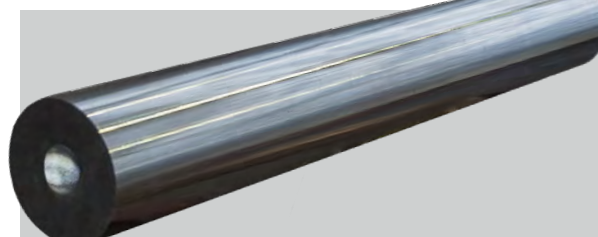
ROUND BARS

Max Dia: 1100 mm Max L: 23000 mm



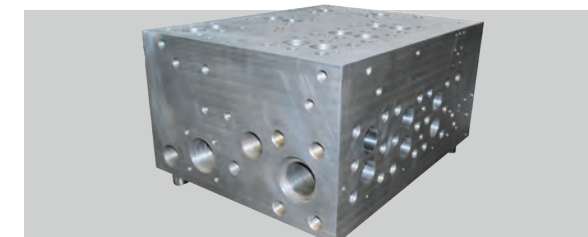
CYLINDERS & RINGS

Max Dia: 2000 mm Max L: 23000 mm



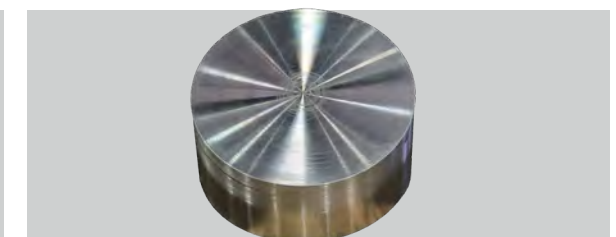
MANIFOLD BLOCKS

Max L: 1800 mm Max W: 1800 mm Max D: 1800 mm



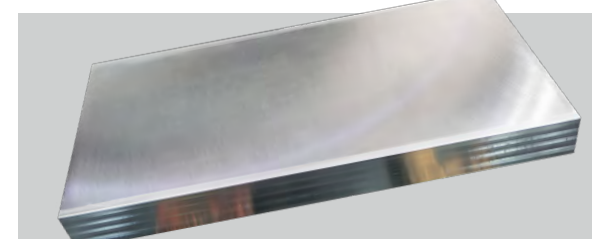
DISCS/BLANKS

Max Dia: 2000 mm



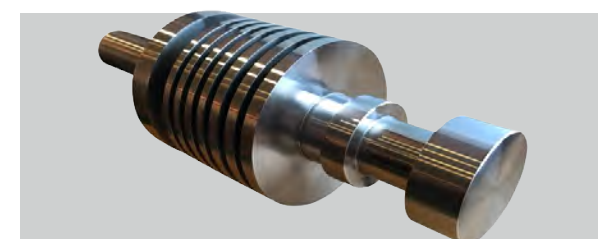
RECTANGLE SECTION BARS & BLOCKS

Max L: 23000 mm Max W: 1800 mm



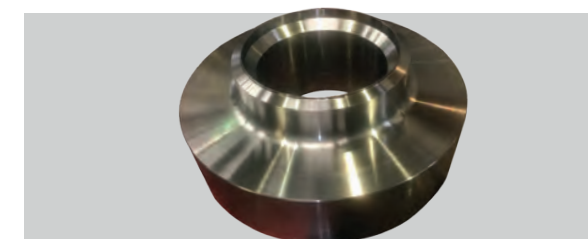
ROTOR SHAFTS

Max Dia of Collars: 1500 mm Max L: 23000 mm



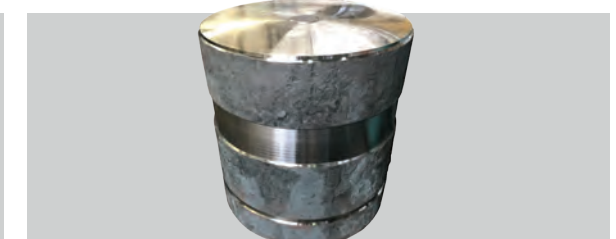
PIPE COUPLING FLANGES

Max Dia: 2000 mm



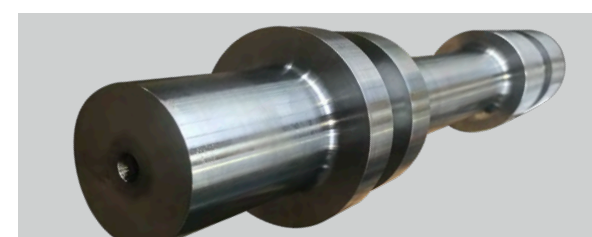
SEMI MACHINED DIE BLANKS

Max Dia: 2000 mm



COUPLING SHAFTS

Max Dia: 1500 mm Max L: 23000 mm



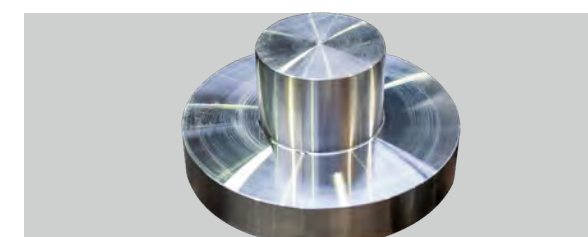
GEAR SHAFTS

Max Dia of Collars: 1500 mm Max L: 23000 mm



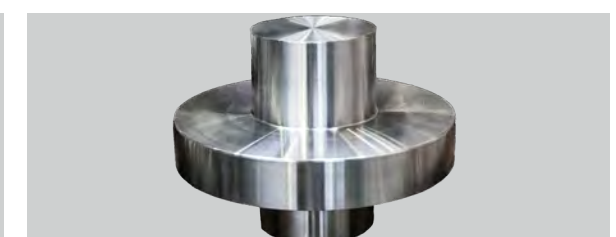
THERMOWELLS

Max Dia: 2000 mm



ANCHOR FLANGES

Max Dia: 2000 mm

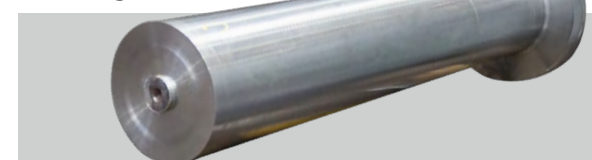


COLLARED SHAFTS/PROPELLER SHAFTS

Max Dia of collars: 1500 mm

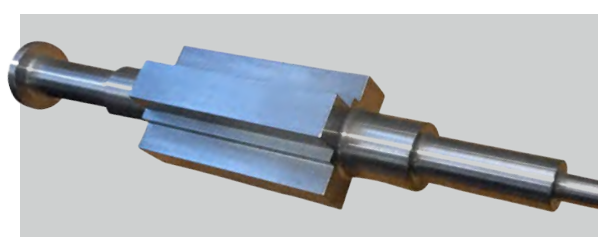
Max ID for Boring: 650 mm

Max Length: 23000 mm



POLE SHAFTS

Max Dia: 1500 mm Max L: 23000 mm



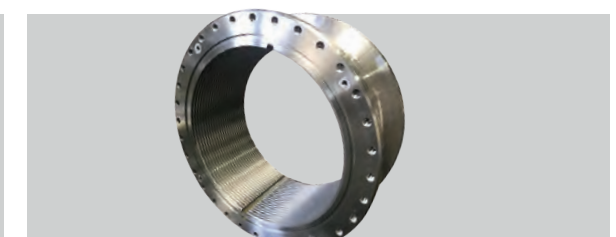
TANK MOULDS

Max L: 4500 mm Max W: 2500 mm Max D: 1250 mm



COUPLING RINGS

Max Dia: 2000 mm Max L: 2000 mm



TAIL SHAFTS

Max Dia of Collars: 15000 mm Max L: 23000 mm



INDIVIDUALLY UPSET FORGED BLOCKS

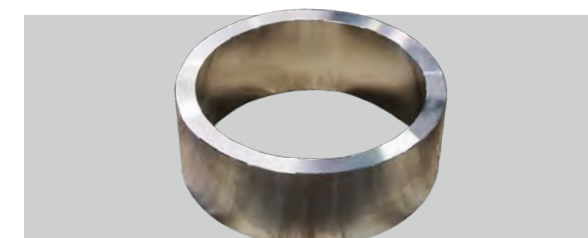
Max L: 1800 mm Max W: 1800 mm

Max D: 1800 mm



PUNCHED & EXPANDED RINGS

Max Dia: 2000 mm Max L: 4000 mm



BREAKING BALLS

Max Dia: 2000 mm

