

### **Shafts**

S & R Mason Engineering Co. has been manufacturing shafts for various engineering and industrial applications since the company was established over 35 years ago.

We have been specializing in the manufacture of fan component parts, including fan shafts from our workshops in Birmingham for over 25 years.

## **Applications**

Our shafts are used for many specialist applications. Most fan shafts are used in single inlet v-belt driven fans, or double inlet, double width fans; however some of our component parts including fan shafts can be found in various other applications all over the world. From Giant Aluminum annealing furnaces, in Greece, to the extraction fans on the roof of McDonalds. Centrifugal fans in Poland, to damper shafts in the control equipment on the fans extracting furnes from New Street Railway Station.

Each shaft is made to order to your exact specifications from Mid Range Carbon Steel (EN8) or CEAX 208 equivalent. We can also supply rectangular parallel, square or gib head keys.

# **Shafting Materials**

Although we endeavor to manufacture shafts from any type material specified by our customers, the majority of our shafts are manufactured from 3 main types of metal.

- Mid Range Carbon Steel (EN8) or CEAX 208 equivalent.
- Stainless Steel.
- High temperature nickel based alloys.

Note: All shafts can be supplied with certificate of analysis where required.



# **Shaft Material Selection (Temperature)**

The temperatures listed below are guideline temperatures only.

### Standard Shaft Material:

Material	Maximum Recommended Operating Temperature*  (Degrees Centigrade)	Commonly Used Applications				
Mid Range Carbon Steel (EN8)	180C	Due to high Standard tensile strength, EN8 is used in most of our industrial applications.				

#### Stainless Steel Shaft Material:

Material	Maximum Recommended Operating Temperature* (Degrees Centigrade)	Commonly Used Applications
316	600C	Used mainly in chemical applications.
304	600C	Used mainly in food/hygiene processing applications.
321	650C	Mid/High Temperature applications.
310	1100C	High Temperature Applications.

<sup>\*</sup>As operational stress', such as oxidisation rates, cyclonic heating, cooling rates, chemical/acidic exposure and flam exposure etc... Vary from job to job. We cannot guarantee these temperatures. All of the variants listed above affect the maximum operating temperature of each individual product. All "Maximum Recommended Operating Temperatures\*" are guidelines based on components that we manufacture for current customers. For more Information, or if you are unsure please contact us.

### <u>Specialist Shaft Materials for use in temperatures exceeding 1100C:</u>

We also manufacture shafts made from high performance alloys for operating temperatures above 1100C. For shafts that operate in temperatures in excess of 1100C please <u>Contact Us.</u>



### Stock:

We carry a large variety of stock in both metric and imperial sizes that we can machine to your specifications.

Note: We are not limited to producing shafts from stock sizes as our facilities are capable of manufacturing shafts up to 300m Dia x 3000m Long. For more information please <u>Contact Us.</u>

### Standard EN8 stock shaft sizes:

Ī	Metric	25mm	30mm	35mm	40mm	45mm	50mm	55mm	60mm	65mm	70mm	75mm	80mm	85mm	90mm	100mm

Imperial	1"	1.250"	2"		

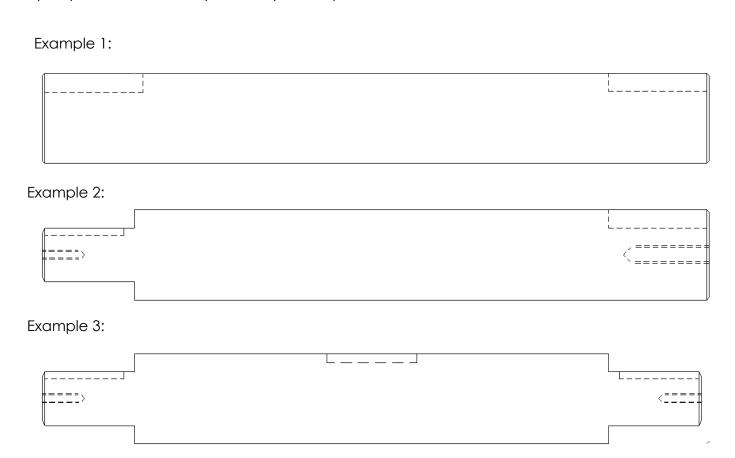
# **Large Quantities**

If you have a requirement for a larger quantity of shafts our CNC facilities enable us to offer you a quicker and better value service. (shaft sizes up to 50mm.) For more information please Contact us.



### **Options/Features**

As denoted by the examples below, all our shafts can be turned down at one end or both ends, to the same or multiple diameters. We also offer a range of, drilling, tapping, slotting, keyway features and keys to suit your requirements.



For more information please <u>contact us</u> or <u>click here for a quote</u>.