

# **Guidelines for Acquiring Material From Purdue's Research Machining Services** (formerly "Central Machine Shop")

Material is sold by the pound and can be cut to your required sizes.

Most material orders can be filled Next Day on stock items

Material is generally in English Measure (inches) and not Metric.

## **Materials Readily Available are Steel, Aluminum & Stainless Steel**

--Steel Bar and Sheet are generally 1020 grade, cold-finished material

--Steel Plate, Tube & Angle are generally 1020 grade, hot-rolled material

--Aluminum Bar, Plate & Round Tube are generally 6061-T6 material

--Aluminum Square Tube and Angle are generally 6063-T52 material

--Stainless Steel material is generally 304 grade with some 316 grade available

Other types of metals are available in limited variety or by special order.

A wide variety of Plastics are also available by special order.

## **Sheet & Plate (thicker) materials are stocked in 4ft x 8ft size;**

--Sheet starts at 24 gage (approx. 1/32") and goes up to 10 gage (approx. 1/8")

--Plate is generally available in 3/16, 1/4, 3/8, 1/2, 3/4 & 1" thicknesses

## **Bar stock is available in Round, Flat & Hex shapes;**

--Round stock generally available in Diameters;

1/8, 1/4, 3/8, 1/2, 3/4, 1, 1-1/4, 1-1/2, 1-3/4, 2, 2.5, 3, 4 & 6"

--Flat Bar (square) generally available;

1/8 x 1/8, 1/4 x 1/4, 1/2 x 1/2, 3/4 x 3/4, 1 x 1, 1.5 x 1.5, 2 x 2, 2.5 x 2.5, 3 x 3, 3.5 x 3.5, 4 x 4 & 6 x 6.

--Flat Bar (rectangular) generally available in 1/8, 1/4, 1/2, 3/4 & 1" thicknesses,

Widths generally go from 1/2" to 6" in 1/2" increments.

--Hex stock starts at 1/2" up to approx. 3" across flats.

## **Angle material is available in Steel and Aluminum**

--"Square" Angle (1x1, 2x2, etc) is generally available in; 1x1, 1.5x1.5, 2x2, 2.5x2.5 & 3x3" sizes

With wall thicknesses of 1/8, 3/16 & 1/4"

--"Rectangular" angle (with different length legs) is generally available only by special order

## **Tube material is stocked in Round or Square configuration in limited varieties**

--Round tube is ordered by its OUTSIDE DIAMETER (OD) x wall thickness (See PIPE below)

--Square tube is also ordered by its outer size and wall thickness

--Rectangular tube is generally available only by special order

--Both Seamed & Seamless Tube is available in Steel & Stainless Steel

--For available sizes please contact the office #494-3710

## **Pipe is available in mainly steel (Black Pipe)**

--Pipe is ordered by its general INSIDE DIAMETER (Unlike Tubing) & Schedule Size (Sch 40, Sch 80, etc)

--Aluminum, Stainless Steel & Brass Pipe is available by special order

# **Cash\* or Purdue Acct. Accepted - Sorry no Credit Cards**

**\*NOTE: Cash sales only available to Registered Purdue Students.**

**Office Ph# 494-3710    [www.purdue.edu/DP/Machineshop/](http://www.purdue.edu/DP/Machineshop/)**