



SCROLL SAW

RIT

The Student Hall for
Exploration and Development

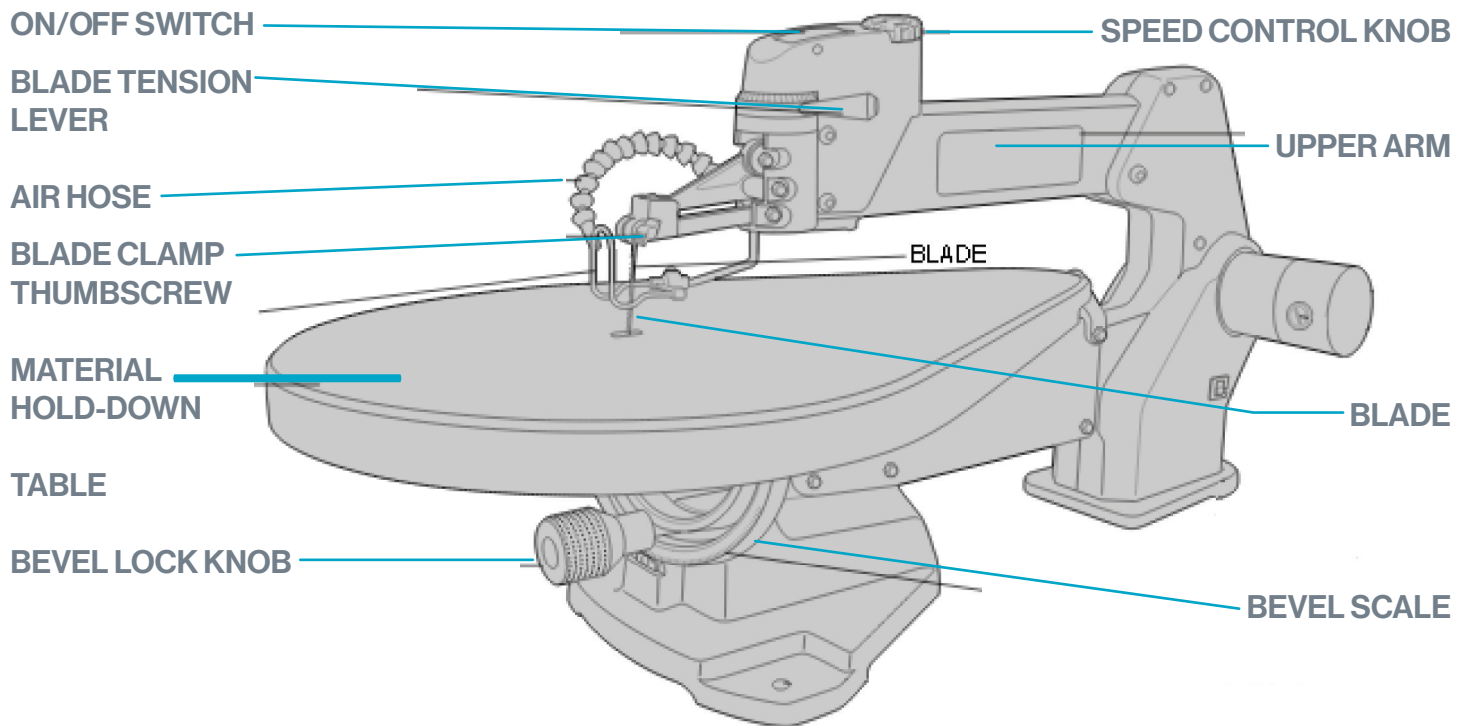
SCROLL SAW

MACHINE INTRODUCTION

VERSION #

THE SCROLL SAW MAKES DETAILED STRAIGHT AND CURVED CUTS

P.2



MATERIALS

ALLOWED MATERIALS

- + Wood
- + MDF
- + Some Plastics
- + Acrylic

BANNED MATERIALS

- Metal
- Most plastics
- Carbon fiber and composites

CONSULT MAKERSPACE STAFF FIRST

- + All other materials

SCROLL SAW

SAFETY

VERSION #

TAKE PROPER SAFETY PRECAUTIONS WHEN OPERATING THE SCROLL SAW

P.3



- Safety glasses required
- Hearing protection recommended (ear plugs or ear muffs)



- Wear short sleeves or roll up long sleeves
- Secure any loose clothing (zip up jackets, tuck in strings, etc.)
- Tie up and tuck in long hair
- Remove jewelry and lanyards, etc.
- Do not wear gloves



- Lower the blade guard 1/8" - 1/4" above the workpiece

SCROLL SAW

WHAT TO BRING

TOOLS AND MATERIALS NEEDED

P.4

VERSION #



MATERIALS

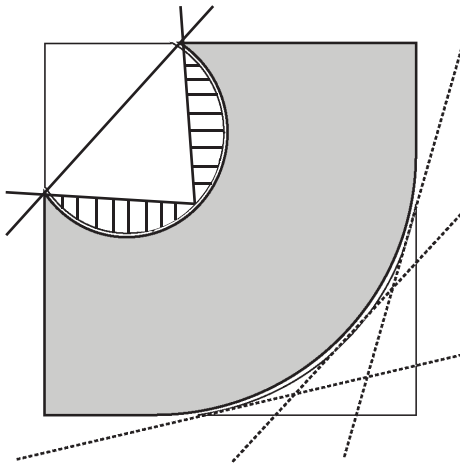
- What we offer
 - 1/8" plywood
- Common places to buy these materials:
 - SHED Makerspace Materials Shop
 - ID Shop
 - Foundations 3D Design Shop
 - Lowe's
 - Home Depot
 - Any wood/lumber store

If bringing your own material, you must provide a receipt or MSDS as proof of what it is



USAGE TIPS

- **Making curved cuts:**
 - Each blade has a minimum cut radius it is capable of based on the blade width
 - Forcing a cut with too tight a radius will damage both the blade and the material being cut
 - Reference the image to the left to make relief cuts when making curved cuts
- **Making straight cuts:**
 - Follow drawn lines.
 - Clamp a reference edge to the table to follow.



RELIEF CUTS GUIDE

SCROLL SAW

HOW TO USE THE SCROLL SAW

RUNNING THE MACHINE

P.6

VERSION #

**KEEP FOOT 1/16" TO
1/8" ABOVE THE WORK
SURFACE**

QUICK CHECK BEFORE STARTING

1. Make sure that blade is properly tensioned.
2. Lower hold down to top of workpiece, within 1/16" to 1/8"
3. Position air nozzle near blade

DURING THE JOB

1. Slowly feed workpiece through, following drawn lines



**HOLD DOWN
WORKPIECE FIRMLY TO
THE TABLE**

**WORK SLOWLY TO AVOID
DAMAGE TO WORKPIECE
AND SAWBLADE**

CLEANUP

1. Sweep off table



BLADE POPPED OUT / BROKEN

- Blade isn't properly tensioned
- Feed work through more slowly

NOT ABLE TO MAINTAIN CONTROL

- Lower speed of oscillation
- Lower feed rate pushing through

BLADE NOT FOLLOWING LINE

- Blade may be under-tensioned
- Pushing too hard
- Blade may be dull

WHEN IN DOUBT ASK A MAKERSPACE STAFF














Hazard Communication Standard Pictogram

The Hazard Communication Standard (HCS) requires pictograms on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification.

HCS Pictograms and Hazards

Health Hazard  <ul style="list-style-type: none"> • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity 	Flame  <ul style="list-style-type: none"> • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides 	Exclamation Mark  <ul style="list-style-type: none"> • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non-Mandatory)
Gas Cylinder  <ul style="list-style-type: none"> • Gases Under Pressure 	Corrosion  <ul style="list-style-type: none"> • Skin Corrosion/ Burns • Eye Damage • Corrosive to Metals 	Exploding Bomb  <ul style="list-style-type: none"> • Explosives • Self-Reactives • Organic Peroxides
Flame Over Circle  <ul style="list-style-type: none"> • Oxidizers 	Environment (Non-Mandatory)  <ul style="list-style-type: none"> • Aquatic Toxicity 	Skull and Crossbones  <ul style="list-style-type: none"> • Acute Toxicity (fatal or toxic)

For more information:



U.S. Department of Labor



OSHA

Occupational
Safety and Health
Administration

www.osha.gov (800) 321-OSHA (6742)

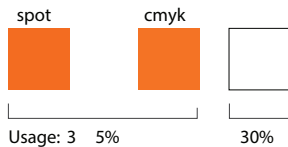
OSHA 3491-01R 2016

RIT Brand Elements collected

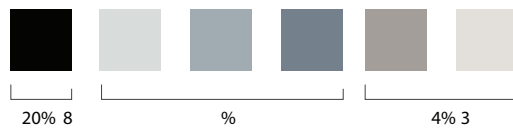
These are some of the elements that we use frequently. Last updated 092721

Colors

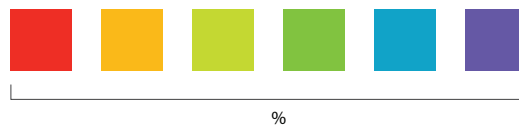
Primary



Secondary



Accents



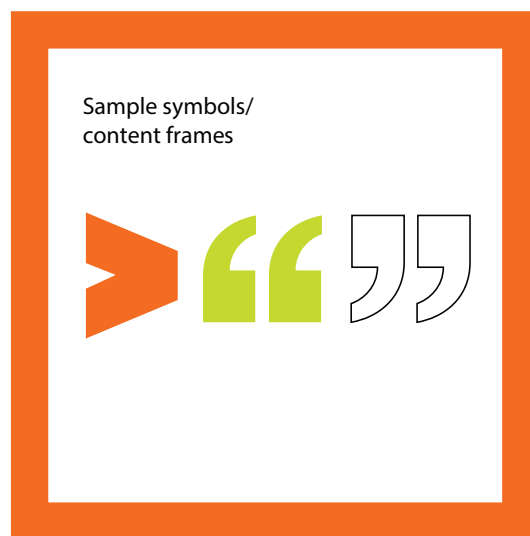
Moving frame edges



Prisms



Closed content frame



Moving content frame



Content brackets



Typical frame line thickness is 14 pt. on a 8.5" x 11" page

Orange corner cut style

Shape the Future
and Improve
the World

Sample usage of an orange line separator and
an open content frame with text

OPEN
HOUSE

Saturday
9/28
2019

We have many exciting
facts to share with you,
but there's one special
attribute we'd like you to
associate with RIT:

Value.

The

Right Fit