# Виртуальный практикум: Обработка листового металла: sheet Metalwork Technology

# Виртуальный практикум Демо-версия

# Структура курса

# Equipment and Tools Used for Cutting Sheet Metal and Safe Working Practices

# Aims and Keywords

- Aims and Keywords: Equipment and Tools Used for Cutting Sheet Metal and Safe Working Practices

# i-ACT: Completing a Risk Assessment

- Using Angle Grinders Safely
- Completing a Risk Assessment Before Using an Angle Grinder
- Aspects to Consider When Completing a Risk Assessment
- Aspects of Risk Assessments

# i-ACT: General Safety and Legislation

- General Safety and Legislation
- Health and Safety
- General Safety and Legislation

# i-ACT: Manual Shears

- Types of Manual Shears
- Types of Manual Shears
- Types of Manual Shears

# i-ACT: Drilling Machines

- Types of Drilling Machines
- Components of a Drilling Machine
- Types of Drilling Machines
- Components of a Drilling Machine
- Types of Drilling Machines
- Components of a Drilling Machine

# i-ACT: Components of a Twist Drill Bit

- Components of a Twist Drill Bit
- Components of a Twist Drill Bit
- Components of a Twist Drill Bit

## i-ACT: Drill Bits

- Types of Drill Bits
- Sharpening Drill Bits
- Types of Drill Bits
- Identifying Drill Bits
- Sharpening Drill Bits
- Types of Drill Bits
- Sharpening Drill Bits

### i-ACT: Machine Shearing and Punching Equipment

- Machine Shearing and Punching Equipment
- Operation of Machine Shears
- Portable Shearing and Punching Equipment
- Machine Shearing and Punching Equipment
- Operation of Machine Shears
- Machine Shearing and Punching Equipment
- Operation of Machine Shears

# Equipment and Tools Used for Forming and Fabricating Sheet Metal

Aims and Keywords	Демо-верс
- Aims and Keywords: Equipment and Tools Used for Forming and Fabricating Shee	et Metal
i-ACT: Safe Use of Forming Equipment	Демо-верс
- General Safety, Legislation, Maintenance and Training	
- Marking Equipment for Identification	
- General Safety, Legislation, Maintenance and Training	
- General Safety, Legislation, Maintenance and Training	
i-ACT: Forming and Rolling Machines	Демо-верс
- Rolling Machines	
- Forming Machines	
- Identifying Forming and Rolling Machines	
- Forming and Rolling Machines	
- Using Forming and Rolling Machines	
i-ACT: Safety Devices on Forming Machines	
- Safety Devices on Forming Machines	
- Safety Devices on Forming Machines	
- Safety Devices on Forming Machines	
i-ACT: Forming Stakes	
- Types of Forming Stakes	
- Identifying Forming Stakes	
- Uses of Different Forming Stakes	
- Uses of Different Forming Stakes	
i-ACT: Forming Hammers	
- Types of Forming Hammers	
- Forming Sheet Metal by Hand	
- Identifying Forming Hammers	
- Types of Forming Hammers	
- Forming Sheet Metal by Hand	
- Types of Forming Hammers	
- Forming Sheet Metal by Hand	

# Aims and Keywords

- Aims and Keywords: Techniques Used for Fabricating Sheet Metal

# i-ACT: Strengthening Sheet Metal

- Methods of Strengthening Sheet Metal
- Methods of Strengthening Sheet Metal
- Identifying Methods of Strengthening Sheet Metal
- Strengthening Sheet Metal

# i-ACT: Fabricating Sheet Metal

- Fabrication Dies
- Fabrication Techniques
- Shrinking and Stretching Metal
- Flanging Dies
- Fabricating Sheet Metal
- Fabricating Sheet Metal

#### i-ACT: Sheet Metal Development

- Sheet Metal Development
- Sheet Metal Development
- Identifying Sheet Metal Developments
- Sheet Metal Development

# i-ACT: Developing Shapes and Patterns

- Developing Shapes
- Creating a Rectangle to Round Half-Plan and Side Elevation
- Parallel and Radial Line Development
- Triangulation
- Developing Shapes

# i-ACT: Developing Elbows, Bends, and Breeches

- Developing a 90-Degree Transition Elbow
- Developing Elbows, Bends, and Breeches
- Developing Elbows and Bends
- Developing Breeches and Lobster Back Cowls
- Developing Elbows, Bends, and Breeches

# i-ACT: Clamps Used in Metalwork

- Clamps Used in Metalwork
- Clamps Used in Metalwork
- Clamps Used in Metalwork

## i-ACT: Non-thermal Sheet Metal Joining

- Non-thermal Sheet Metal Joining
- Non-thermal Sheet Metal Joining
- Non-thermal Sheet Metal Joining Techniques

### i-ACT: Thermal Sheet Metal Joining

- Types of Brazing
- Brazing and Soldering
- Differentiating Between Brazing and Soldering
- Types of Brazing and Soldering
- Thermal Sheet Metal Joining

### i-ACT: Electric Resistance Welding (ERW)

- Spot-Welding as the Primary Type of ERW
- Other Types of ERW
- Overcoming Common Problems with ERW
- Uses of ERW and Spot-Welding
- Factors Affecting ERW and Spot-Welding
- Identifying Different ERW Methods
- Identifying Materials and Factors Involved in ERW

### i-ACT: Checking Sheet Metal Products for Dimensional Accuracy

- Types of Micrometers and Callipers
- Dimensional Accuracy and Distortion
- Methods and Tools Used to Reduce Distortion
- Types of Callipers and Micrometers
- I-Test: Dimensional Accuracy and Distortion

#### i-ACT: Restoring the Work Area Following Fabrication

- Restoring the Work Area Following Fabrication
- Restoring the Work Area Following Fabrication
- Restoring the Work Area Following Fabrication

#### **Practical Tasks for Sheet Metalwork and Fabrication of Materials**

### Aims and Keywords

- Aims and Keywords: Practical Tasks for Sheet Metalwork and Fabrication of Materials

# i-Practice: Setting Up and Checking a Guillotine Prior to Operation

- Setting Up and Checking a Guillotine Prior to Operation (Training) Практикум-тренинг.
- Setting Up and Checking a Guillotine Prior to Operation Практикум-контроль.

### i-Practice: Setting Up and Checking a Notching Machine Prior to Operation

- Setting Up and Checking a Notching Machine Prior to Operation (Training) Практикум-тренинг.
- Setting Up and Checking a Notching Machine Prior to Operation Практикум-контроль.

# i-Practice: Fabricating a Fan Housing Unit

- Fabricating a Fan Housing Unit Part 1 (Training) Практикум-тренинг.
- Fabricating a Fan Housing Unit Part 1 Практикум-контроль.
- Fabricating a Fan Housing Unit Part 2 (Training) Практикум-тренинг.
- Fabricating a Fan Housing Unit Part 2 Практикум-контроль.

#### i-Practice: Hollowing and Planishing a Bowl

- Hollowing and Planishing a Bowl (Training) Практикум-тренинг.
- Hollowing and Planishing a Bowl Практикум-контроль.

# i-Practice: Developing a Pattern for a Cone with a Pitch

- Developing a Pattern for a Cone with a Pitch (Training) Практикум-тренинг.
- Developing a Pattern for a Cone with a Pitch Практикум-контроль.