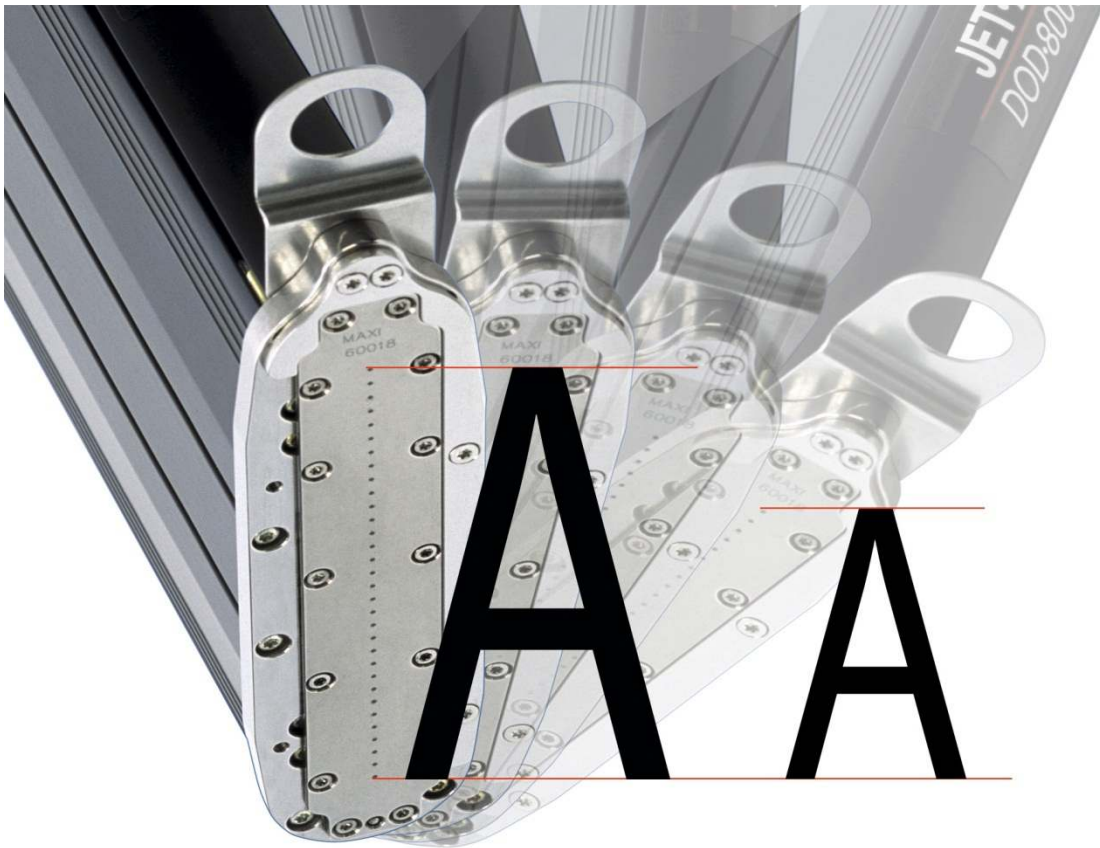


Introduction/Theory of Operation
Course Syllabus

Drop On Demand Printheads



Drop On Demand Printheads

Introduction/Theory of Operation Course Syllabus

Class Hours: 8:30 - 4:30

Lunch: 12:00 - 1:00

Instructor Office hours: 8:00 - 8:30 & 4:30 - 5:00

Instructor: Matthews Intl.
Technical Training Instructor
Matthews International Corporation
Marking Products Division
6515 Penn Avenue
Office Phone: 412-665-2500

A. DESCRIPTION

This course is a supplement to all Drop on Demand (DOD) courses provided by Matthews. This course is to introduce the student to the range of DOD printheads and the theory of operation of the DOD printheads.

B. ORGANIZATION

This is a lecture-lab course in which the instructor presents discussion topics. Labs will be presented by the instructor and performed by the student. All labs are designed to re-enforce the lecture portion of the course.

C. COURSE OBJECTIVES

1. To introduce students to the variety of DOD printheads offered by Matthews.
2. Upon completion of this course the student shall be able to properly identify and associate the proper DOD printhead with the proper DOD printer system.

D. COURSE TOPICS

The course will cover the following topics:

1. **Introduction**
 - a. Safety (Matthews)
 - b. Facilities (Matthews)
2. **Welcome to Matthews Marking Products**
3. **DOD Printheads and Theory of Operation**
 - a. Technology – DOD explained (How the mark is made)
 - b. Print Heads
 - i. Standard Series Printheads
 - ii. 8000 Series Printheads
 - c. Anatomy of a Printhead
 - d. Sizes of Printheads

4. Overview

- a. Printhead Description
 - i. Standard Series Printheads
 - ii. 8000 Series Printheads
- b. Specifications
 - i. Power requirements
 - ii. Ink requirements
 - iii. Speed limitations

5. Daily Maintenance

- a. Printhead cleaning
- b. Ink System Filter changes

F. GRADING PLAN

ATTENDANCE:

Attendance is mandatory for the entire length of course. Any failure to attend all classroom lectures and labs will result in failure of class by the student and employer will be notified.

GENERAL: Upon successful completion of the class, the student will be awarded a certificate of completion.

G. STUDENT REQUIREMENTS

1. Students are required to bring a laptop PC
2. Safety Glasses (Non-prescription Safety glasses will be provided)
3. Safety Steel Toe shoes in the event that training may take place on the shop floor.

H. CLASSROOM RULES OF CONDUCT

1. As a courtesy to all students/staff, cell phones must be turned off while in class.
2. Laptops are only permitted for designated training purposes.
3. Recording devices are not allowed in the classroom.
4. Food is not permitted in the classroom during course instruction.
5. Beverages are allowed only on the student's desk, not equipment benches.
6. Class lab time is expected to be spent in lab work. Lab time is not free time. Attendance and concerted work on assignments are required.
7. Breaks shall be given at the discretion of the instructor.

I. YOUR IDEAS, EVALUATIONS, ETC.

Students are encouraged to complete a course evaluation at the completion of the class. In general, your ideas, comments, suggestions, questions, etc. are welcome. Your discretion in these matters is expected, however.