LESSON PLAN

Date_____ Trade:- Welder

Name_____ Unit/Lesson:- Thirty Three

Subject:- Heat input and techniques of controlling heat input during welding. Heat distribution and effect of faster cooling.

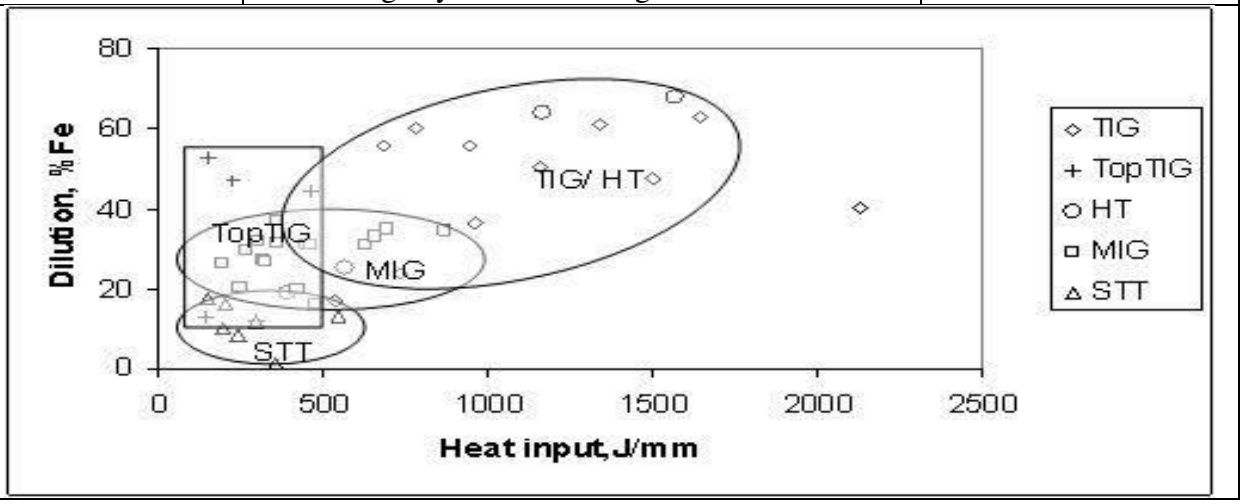
Motivation:- in previous lesson we study about mig welding defects reasons and their remedies. We must try to make a joint without any defect .

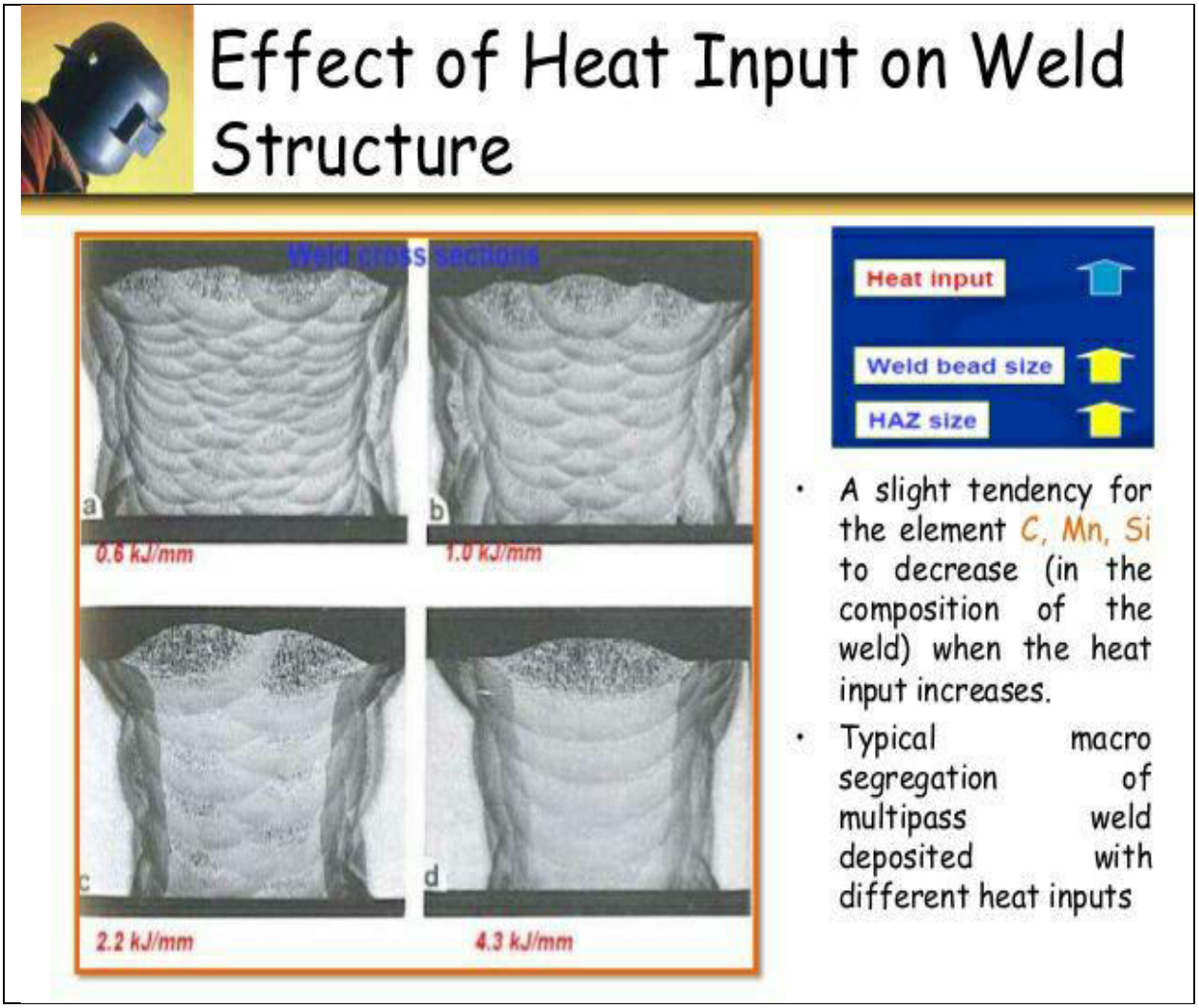
PREPARATION

1) (Materials, Tools, Models, Charts and other aids)

1) **INTRODUCTION:-To day we discuss about heat input and controlling heat during welding. During welding approximate 3000 ^{o} Celsius to 4000 ^{o} Celsius temperature generated . So the controlling of heat expansion is compulsory.**

Topic	Information Point	Spot hint
Heat input	Without heat we have no imagine to weld a metal but this heat also made change internal structure of metal so controlling of heat input and distribution are most compulsory.	
Process	There are many process to control and distribute heat in equal area. 1. Preheating 2. Tack weld 3. Backing up plate 4. Intermittent welding 5. Proper process of welding	
Controlling	Post heat treatment is most effective process for controlling any internal damages of metal.	





Questions:- 1. What is heat input ?

2 What is heat distribution?

3 How control heat distribution and what is effects?

Assignment:- Heat input and techniques of controlling heat input during welding. Heat distribution and effect of faster cooling.

Next lesson:- Preheating and post heating weld treatments. Use of temperature indicating crayons.

Checked By_____ Instructor_____