

ANIMATRONICS



INTRODUCTION

- ▶ The first use of Audio-Animatronics was for Walt Disney's Enchanted Tiki Room in Disneyland, which opened in June, 1963.
- ▶ The Audio-Animatronics has changed into movie-Animatronics with the usage of engineering technologies.

What Is ANIMATRONICS?

- ▶ Animatronics is the technology employing electronics to animate motorized puppets (The American Heritage Dictionary). An animatronic figure is often used in movies to create grand special effects.
- ▶ Animatronics are specific type of Robot but they differ from common robots as they are used in entertainment field.

Idea of Animatronics

- ▶ Animatronics is the combination of the ancient art of puppetry with modern electronic technology.
- ▶ The idea of Animatronics originated from the Walt Disney's Tikki room.

Formation Of Animatronics

Step 1: Design Process

During the design process, the client and the company developing the animatronics decide what the character will be, its appearance total number of moves, quality of moves, and what each specific move will be .

Step 2: Sculpting

The sculpting department is responsible for converting two-dimensional ideas into three-dimensional forms

CONT...

Step 3: Moldmaking

The molding department takes the form created by the sculptor and creates the molds that will ultimately produce the character skins. Molds can be soft or hard, single or multiple pieces, and reusable or non-reusable.

Step 4: Armature Fabrication

Meanwhile, various body armatures are being created and are assembled in the welding metal-fabricating areas.

CONT...

Step 5: Costuming

The costume, if there is one, is usually tailored to the character and its movements. Animation tailoring can be a very difficult tedious process considering the variables .

Step 6: Programming

Programming is the final step, and for some animations it is the most rewarding. Programming can be done either at the manufacturing facility or at the final installation site

MAKING OF ANIMATRONICS SPINOSAURUS USED IN JURASSIC PARK

- ▶ Put it on paper.
- ▶ Build a maquette(miniature model).
- ▶ Build a full size sculpture.
- ▶ Create a mold(from the sculpture) and cast the body.
- ▶ Build the animatronic components.
- ▶ Put it all together.
- ▶ Test it and work out any bugs.

CONT...

► In the Beginning



**An artist sketches the
spinosaurus**

► Build



**one-fifth-scale maquette
of the Spinosaurus**

CONT...

► Big as Life



Details are carved into full size sculpture

► Molding



Creating the mold

CONT...

► Creature Creation



Working on the head of
Tyrannosaurus rex

► Putting it Together



All hydraulic systems are
installed and checked.

CONT...

► Putting it Together



The "skeleton" of the Spinosaurus

► Painting the skin



Painting the skin

CONCLUSION

With the advent of ANIMATRONICS entertainment world has got its own prominence among all other fields. This shine to Animatronics is because of Engineering technologies.

THANK Q



QUERIES?

